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TWELFTH ANNUAL REPORT

OF THE

BOARD OF REGENTS

OF THE

UNIVERSITY OF WISCONSIN,

FOR THE YEAR ENDING

September 30th 1859.

MADISON:
JAMES ROSS, STATE PRINTER—PATRIOT OFFICE.
1860.

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REPORT.

To the Honorable the Legislature of Wisconsin:

At a meeting of the Board of Regents of the State University, held on the 21st inst., the undersigned were appointed a special committee to make a report of the doings of that body during the year, ending September 30, 1859, to the Legislature, in the temporary absence of the Chancellor.

Owing to the severe and protracted illness of Dr. Barnard, he was unable to reach Madison and enter on his duties as Chancellor, until the latter part of May, or to meet with the Board of Regents, in special session, until the 22d of June, following. At that meeting he submitted a communication, which is hereto appended, setting forth briefly the general policy which he wished to have pursued. At his request Dr. Lathrop continued to discharge the duties of internal administration until the close of the term. On the commencement day, July 27, 1859, Dr. Barnard was formally inducted into the office of Chancellor, in the presence of the State officers, the Judges of the Supreme Court, the Regents, Professors and Students of the University, the Regents of Normal Schools, the officers and members of the State Teachers' Association, and a large concourse of the friends of the institution. Copies of the addresses of the Hon. Carl Schurz, on the part of their Board, and of Julius T. Clark, Esq., in behalf of the Normal Regents, and the inaugural address of Chancellor Barnard, on that occasion, were requested for publication, under the direction of the Executive Committee.

All facts relating to the management and financial concerns of the institution during the year past, will be found in detail in the accompanying appendix.

The total attendance of students during the year, upon the several university departments, have been 243—to wit:

In the Classical Course	34
Scientific	81
Preparatory	44
Commercial	84

A catalogue of students, and a statement of the course of study in the several departments, with other information relating to the internal arrangement and management of the University will be found in the Report of Prof. J. W. Sterling.

The finances of the institution growing out of the erection of the new hall, and the failure of the Board to receive either the appropriation made by the State, from the principal of their fund, or the temporary loan from the general fund, authorized at the last session, are, and have been somewhat embarrassed.

The following exhibits the financial condition of the University, on the 30th day of Sept., 1859.

Am't due fund on certificates of sales	$248,483 02
" " on loans	52,242 20
Total productive fund	$303, 923 60
Balance in treasury	3,198 60
Total	$300,725 22

The permanent indebtedness of the institution is as follows:

Am't of loans from School Fund	$30,000
" " University Fund	24,110
" " General Fund	10,000
" " J. D. Ledyard	5,000
	$69,110

Floating indebtedness:

Outstanding warrants drawing 10 per cent interest	$20,683 73
Balance due contractors	612 45
" laborers upon grounds, &c., &c	200 00
" Superintendent	500 00
	$21,996 18

RESOURCES:

The resources for the ensuing year are estimated as follows:

Annual income	$20,000
Fees from Students	1,500
Total	$21,500

The expenditures, including salaries, interest, and contingent expenses of all kinds, it is estimated, will leave no surplus in the treasury at the close of the year.

The Regents have directed their executive committee to draft a memorial to your honorable body, setting forth the amount and kind of relief desired, and which, if granted will, it is believed, entirely relieve the board of future financial embarrassments.

The committee take pleasure in saying that in their opinion the affairs of the institution and its prospects are hopeful and full of promise for the future. It was scarcely to have been expected that the Regents could have erected within the past ten years the necessary buildings, costing as they have an aggregate of about $85,000, with no resources but loans, or the income of their fund—and have carried on the several departments and courses of study as the have, without occasional embarrassments. Still, had it not been for an act of ill faith on the part of public officers in loaning out the surplus actually in the treasury, when the act authorizing the central edifice was passed; or had not the financial panic of 1857 occurred, they would have been enabled to complete their undertaking without calling upon the State for assistance. As the case now stands, the relief asked for can, it is believed, be granted without any detriment or inconvenience, either to the State or University. By the creation of a sinking fund, their whole indebtedness can be liquidated without material interference with the purposes and objects of the institution. All of which is respectfully submitted.

H. A. TENNEY,
O. M. CONOVER,
J. L. PICKARD,
Committee.

APPENDIX.

A.

CHANCELLOR'S COMMUNICATIONS.

At a special meeting of the Regents of the University of Wisconsin, held at the Capitol, on the 22d day of June, 1859, Chancellor Barnard read the following paper:

Gentlemen of the Board of Regents:

I thank you for this early opportunity, after reaching the State, of commencing my administration of the affairs of the University with a personal introduction to its legal guardians, under whose direction I am to act, and without whose continued kindness and confidence, I do not anticipate even a moderate degree of success in my labors.

In availing myself thus early of the privilege and requisition of your ordinance, defining the duties of Chancellor, "to recommend to your consideration such measures as he shall deem necessary and expedient," I wish mainly to express my readiness and desire to act with you and for you, in such direction as you may officially indicate, and my determination to retire from my present position so soon as I shall know or feel that we do not harmonize in our aims and plans. With this declaration, and for the purpose of indicating the general aim and policy with which I enter upon my duties, I invite your attention to the following subjects:

1. I wish to settle as early as possible, the lowest point at which the proper studies of the University are to commence, by removing the students and studies which constitute the Preparatory Department, into the Public High School of Madison. A brief visit to the classes of each, and a conference with their instructors, has satisfied me that the two are now trying to do the same work, and to some extent, are a mutual hindrance, instead of a help to each other, and that a union of students and efforts,

will make a far better institution than either. A good Public High School in this city, while it will constitute an indispensible feature in the public Schools of Madison, and an unmixed blessing to its people, can be made a model for schools of this grade in the cities and large villages of the State, and thus become itself, and help to make the other Public High Schools, the natural sources of supply for the University and other institutions of the same grade. A State cannot have good elementary schools, or an efficient University, without schools of an intermediate grade, developing and encouraging a love of learning in the young, and furnishing the necessary preparation for the studies of the University. So far as I can now see, this is the weak point of the system of public instruction in Wisconsin.

2. I wish to take the necessary preliminary steps to develop the Normal Department of the University, and to bring it into close and immediate connection with the State system of Normal instruction. This, in my judgment, can best be done, so far as their studies are identical, and so far as professional instruction in classification, teaching and discipline of the district, village and city school are concerned, by uniting the Normal pupils of the University, with the Normal class of the Public High School of Madison; and at the same time affording them opportunities of residence, class instruction and lectures, in other studies at the University. I would also advise the opening of a brief course of Normal instruction for those teachers who cannot spend even the time at present required by the Normal Regents, of institutions participating in the fund administered by them.

3. The immediate development of the University course, by practical instruction in the application of science to individual and public health, to agriculture, architecture, and other industrial pursuits of the State, seems to me to be called for by the true interests of the University and of the State, if these can ever be otherwise than identical. The completion of the central edifice, or University Hall, will give, if not the best, at least large facilities for an analytic laboratory, and for practical operations; and the appointment of at least one additional Professor in this Department will be absolutely necessary to the proper inauguration of the department of practical science, or a polytechnic school.

4. An early revision of the ordinances and by-laws, including the courses of study, seems to me necessary; and in such revision I would recommend, among other particulars, the admission of pupils to any department or study, and for any period of time, not less than one term, provided they are found qualified, on examination, to enter, and will conform to regulations;—the classification of pupils by their individual studies, and not by any grouping of studies, or by the period of residence; the conferring

of all degrees and certificates of proficiency after public examination, conducted by both written and oral questions and answers, and without reference to the institution where candidates have pursued their studies; the arrangements of the terms and vacations so as to better accommodate both students and instructors, allowing the former to devote their vacations to such kinds of labor, in the field or school as will enable them to pay the expenses of residence here, and allowing the latter to visit other colleges, and engage by lectures in the educational movements of the State; and the appointment of all professors, hereafter, for specified periods of time, and with salaries to some extent dependent on the amount of time devoted to instruction, and the number of pupils in attendance on each.

5. While the comfort, health, morals, manners and expenditures of students, *from* abroad, are directly and powerfully influenced by the arrangements which are made for their board and lodging, I am clear that those arrangements should not be a tax on the income of a fund established for purposes of instruction; much less be made to absorb the fund itself. Whatever may be the seeming necessity for dormitories in the first beginning of an institution, experience has shown that the objects had in view can be gradually secured without the enormous expenditure, both in the original cost of buildings, and in the constant repairing and modifications of the same. It is now too late to inquire how far the interest of $40,000 (less than the original cost of the two dormitories) temporarily withdrawn, would have assisted families of the right character to establish permanent boarding houses in the immediate neighborhood of the Halls, Library, Cabinets, Class and Lecture rooms, which constitute the real material requirements of a University. The only thing to be done now is to make the most economical use of what we have invested in buildings and outfit for lodging and boarding students, and secure the nearest approach to a true domestic life for them. The drain on the income of the institution, for this purpose, should be stopped at once, thoroughly and forever.

6. The exceeding beauty of the situation and grounds of the University arrest the eye, and command the admiration of every stranger, and help to weave the web of attachment, in which every student must feel himself bound to this institution. No encroachment of wave, no neglect, and no amount of violence, can materially diminish the general effect of the scenery which is outspread from every window of the University buildings, and from every foot of its enclosure. But I would respectfully remind the Regents, that no friendly appeal, and no legal effort, should be spared to protect the grounds bordering on Lake Mendota from further destruction, by artificial embankments, or by reducing the waters of the lake to its former level. Every storm drives the trespassing waves on to

the banks so as not only to mar their beauty, but wash away the property of the University.

7. Whatever may have been the real or imaginary necessity for the large expenditure for buildings, which will continue for years to come, in interest, insurance, repairs and sinking fund, to absorb a large amount of the income of the productive property of the University, it is to be hoped that that necessity will pass away with the completion of the main edifice, and henceforward whatever can be spared from the expenses of instruction, will be devoted to the increase of the library and cabinets, and the extension of the laboratory, and of facilities for the application of science to the industrial pursuits of the State.

8. In conclusion, I must respectfully remind the Regents, that in accepting this office, I expressly stipulated, that I was to be relieved from all instructional duty in the classes of the University, and was to be at liberty to co-operate with the Board of Regents of Normal Schools, as their agent, and with the teachers and friends of common schools, in their efforts to develop all the means and institutions of education, intended for the great masses of the people. On this firm and broad foundation of good elementary schools, must the higher institutions of learning rest, and in the sympathy and confidence of the people, find their necessary encouragement and support.

Respectfully submitted,
HENRY BARNARD.

MADISON, July 26th, 1859.

To the Regents of the University:

As I am not prepared, from a personal knowledge of the financial and instructional operations of the University, to give minute information, as to its present condition, or make suggestions of improvement, in addition to such as I had the honor to submit to your Board, at the special meeting in June, I respectfully ask your attention to the accompanying communication of my predecessor, whose administration of this office, in accordance with your vote, and with my request, covers the collegiate year, which is about to close.

I regret that the absence of Dr. Lathrop at the time, should deprive the Board of any additional personal explanation, which may be called for, on any point presented in his communication.

Respectfully submitted,
HENRY BARNARD.

To Hon. Henry Barnard,
Chancellor of the University of Wisconsin:

In compliance with your request, I submit a brief statement of the administration and condition of the University, during the year ending July, 1859.

The whole number of students in attendance on the instructions of the University, in connection with the several classes in the departments of Science, Literature and the Arts, has been one hundred and fifty-nine.—Outside of this number, there have been in the Commercial College, attached to the University, eighty-four pupils, making a total of two hundred and forty-three.

Courses of instruction have been rendered in the following departments, to wit:—in Ethical and Political Science, in Mental Philosophy, Logic, Rhetoric and English Literature; in Mathematics, Natural Philosophy and Astronomy; in Physical Science; in Ancient Languages and Literature; in Modern Languages and Literature; and on subjects preparatory to these several University courses. Public Examinations, of all the classes, have been holden at the close of each term; the one at the close of the third term, covering the studies of the year. Those passing this latter examination, will be admitted to the instructions of the year next in advance.

Eight of the whole number, on the fourth year of the University course, just closed, are candidates for appropriate degrees in Science and Arts, to be awarded at the approaching commencement.

The attendance of students on the prescribed exercises has been exemplary, and the standard of scholarship high.

Weekly reports are made by each officer, of the attendance and proficiency of students from whom exercises are due; and at the close of each term, the result is made up, and goes upon the permanent records of the institution.

The deportment of each student is also made a matter of weekly review, at the stated meetings of the Faculty, and of permanent record at the close of the term.

Whenever it is made apparent that the deficiencies of any student, in scholarship or deportment, are such as to unfit him for continued membership, such notice is given to the the parent or guardian, and usually results in the voluntary withdrawal of the member from the University body. This result, however, is not reached, till faithfl admonition has been tried and proved unavailing. And it is not often that more stringent measures are needful to the conservation of the order and the healthful tone of discipline in the institution, The boarding establishment, in its present form, was set up to subserve two valuable ends. First, to secure cheap board to the students; and secondly, to make the presence of the families of the Faculty an elevating and a co-operative influence in the administration of the University. It is doubtless true, that the necessity of the establishment, as matter of economy, has in a good degree, passed by. By far the greatest number of the students, not residents of Madison, board themselves, at their rooms, at an expense, varying from 70 cents to $1 per week. Arrangements have been made by them, with the victuallers in town, for fresh supplies of food daily; and most of the objections to the system, which were apprehended in the beginning, have not been realized in practice. It is a feature in our institution, which, under proper regulations, may be preserved and encouraged.

Another fact, tending to obviate the necessity of the boarding establishment, as matter of economy, is the decided fall in the price of board in private houses in Madison, and the increase in the number of families willing to open their houses for the accommodation of students. It is believed by some, who profess to be well informed, that good board, in private families, in the vicinity of the University, may be obtained, currently, from this time onward, at two dollars per week. And that the Common Hall is not needed, to prevent combination for the purpose of raising the charge for board, and securing monopoly prices.

However this may be, I have had occasion to know, that many parents and guardians have extended their patronage to the University, in the confidence, which the residence of the families of the Faculty has inspired, and would regret to see a feature of our system, so conservative of the morals, manners and order of the institution, done away. The entire abandonment of the grounds by the families of the Faculty, would impair confidence, I think justly, in the order and the safety of the institution, as a residence for young men.

It is not, however, necessary, in order to secure the benefits of the residence of the families of the Faculty on the grounds, that the present arrangement should be preserved. The feature of the common hall may be, with advantage, replaced by residences in severalty, either in the wings of the two dormitory buildings, or in separate houses, adjacent to them. The conditions of holding the tenements favoring the admission of students to the tables of the several families of the Faculty.

I think it specially important, that the presiding officer of the University, in actual administration of the institution, should reside on the grounds, either in the buildings, or in close proximity to them. Convenient and spacious apartments, for this purpose, may be fitted up at small expense, in the south wing of the south dormitory building, after the opening and occupation of the new edifice.

The present boarding establishment went into operation in September, 1855. The stewardship was, for nearly two years, in the hands of a Professor. In the spring of 1857, the Board appropriated $500 per annum, for the support of a Steward, who was to supply, out of that sum, the matron for the establishment, at a salary of $250. And in addition to the immediate duties of provider for the establishment, the Steward was charged with a variety of other duties, as the curator of the property, and the actuary of the institution. The extent of these duties may be understood by referring to the accompanying letter of instructions I sent to Mr. Williams, who was appointed to the office. The Matron has been paid, since the spring of 1857, out of the proceeds of the boarding establishment, and but $250 per annum has been drawn from the income of the University, for the support of the Steward and Actuary.

The employment, permanently, of some intelligent and trustworthy gentleman, to take care of the property of the institution, and look after its *temporalities*, combining the charge of all these interests which do not pertain to instruction and the general administration of the University, would subserve its economy and good order. Such officer should reside on the grounds, and give his time and thought to the institution.

An order was made by the Board of Regents, during the years 1857–8, for the revision of the By-Laws of the University. A report was made, and the subject was re-committed to the Executive Committee, to perfect the project and make final report. The papers are now in the hands of Professor Sterling, the Secretary of the Faculty, subject to the call of the committee.

The Board, at their meeting, in July, 1858, instructed the Faculty to report two courses of study, occupying four years each, and terminating the one in the degree of A. B., and the other in the equivalent degree in Science. As the Board, at their June meeting, made other disposition of the subject, the Faculty have not executed the order.

In the matter of degrees, I see no good reason for departing from the plan adopted by the Board in 1857, on recommendation of a special committee, set forth on the 41st page, of the 9th annual report. The plan awards the degree of A. B. to those who complete the usual collegiate course; the degree of Bachelor of Science to those who complete the parallel four years course, and the degree of Bachelor of Philosophy to those who complete both courses. It was contemplated that the B. L. course should be identical with the B. A. course, except in the matter of the Latin and Greek languages; the space occupied by these, to be replaced by the Modern Languages, Engineering and the Applications of Science to Agriculture, and the Mechanic Arts. So far as the two courses are identical, the classes in the two should be brought together, in recitation and lecture, for economy of instructional force, and diminution of the expenditures of the institution in that direction. As threefourths of the two courses may be made to occupy the same ground, there will be necessity of doubling the instructional array only for the remaining one-fourth, comprising the Classics in the one, and the substitutes for the Classics in the other.

As soon as the High School, as a part of the State system of Education, shall be sufficiently developed to do the preparatory work for the University, the latter should undoubtedly retire from this branch of educational service. This condition will be gradually realized. In the beginning, it was necessary for the University to make its own material; but the Academies and High Schools are beginning to send up young men, some of them fully prepared for the University courses. I am inclined to think, with the present array of permanent officers, with the accession of Dr. Ried and Mr. Coryell, that provision may be made for all necessary preparatory instruction, without the additional expense of the tutorship. If there should remain a class or two unprovided for, worthy and competent young men may be found in our older classes, who would be glad to take the service of holding one or two recitations per day, as matter of support.

Provision has been made for the purchase and sale of furniture and books from and to the students, for their benefit and convenience, as they leave and enter the institution. I consider the arrangement a good one; but great care should be taken that it should occasion no charge against the income of the University, except in the original outlay. This is one of the subjects which should be administered by the Steward or Actuary, having his office on the grounds, and permanently connected with the institution.

Since the valuable donation, by Dr. Castleman, of books and pamphlets, the Library has received no accessions, except through authorized subscriptions for new publications and periodicals, and occasional contributions from national and State Legislatures.

Apparatus and scientific collections have not been substantially enlarged during the past year, but are sufficient for the ordinary purposes of illustration in the departments to which they belong.

The transfer of all these, and the operations of the class rooms, into the new edifice, will be an event of great interest and value to the institution. The erection of this building, and the preparation of it for occupation, has trenched upon the current income of the University, and will continue, for a period, to straiten its operations in other directions.—After the pressure of this expenditure shall have passed by, permanent appropriations should be made for the increase of the Library especially, and for the other aids of instruction.

On the occupation of the central edifice, the public rooms, hitherto in temporary use, in the two dormitory buildings, will revert to their legitimate uses, for study and lodging for an increased number of students.—Should any portion of the south building continue to be devoted to family occupation, in any form, the large room over the dining room, would be needed for parlor uses.

The necessity of rear structures attached to both dormitory buildings, containing yard for wood, &c., with requisite out-houses, is quite apparent, even if the buildings are occupied wholly by students. To arrange this without offence, would require the study of an architect. Two sets of drawings, touching this matter, were made some two years ago, and the plans are worthy of consideration.

The attention of Dr. Reid, recently elected to a Professorship of Applied Science, in the University, should be turned to the subject of improving the mode of heating and ventilating the dormitory buildings now in use. I have no doubt the effectiveness and economy of the existing arrangements may be greatly increased.

In the contingency of the frequent absence of the Chancellor, in the prosecution of his specific work, it will greatly concern the order and health of the University, that provision be made for the practical administration of its affairs, as occasion may require. The member of the Faculty on whom this burden shall be imposed, will find it somewhat the heavier from want of the prestige of position. There will be short justice in exacting this class of duties from any Professor, without material increase of salary. I suggest this matter freely, as entirely out of the way of any personal interest in it.

I regret, Mr. Chancellor, the varied and desultory manner in which I have been compelled to respond to your request. As a colleague, I cherish a profound sense of duty and loyalty to the head of the institution. Out of the colleagueship, my sympathies will ever be with you; and my prayer is for the usefulness and distinction of the University, and that the fitting structure to be erected on the good foundation already laid, may be the honor of the wise master builder.

Truly and cordially, your friend,

J. H. LATHROP.

B.

REPORT OF THE EXECUTIVE COMMITTEE.

To the Board of Regents of the University of Wisconsin:

The Executive Committee, having in charge the affairs of the Institution, during the recess of the Board, have held meetings from time to time, as the business affairs of the University seemed to require, and have acted upon such special matters as the Regents have directed. A record of their proceedings has been kept by the Secretary of the Board, which will be found in his office, and to which reference is respectfully made.

N. W. DEAN,
L. B. VILAS,
O. M. CONOVER.

C.

REPORT OF THE TREASURER.

To the Board of Regents of the University of Wisconsin:

The Treasurer of the University, respectfully submits his annual report, containing a detailed statement of the receipts and disbursements of his office, during the fiscal year, commencing on the 1st day of October, 1858, and closing on the 30th ultimo: from which it will appear that the receipts of the year, have amounted to the sum of $40,517.79, and the disbursements for the same time, to the sum of $35,453.48; leaving in the treasury at this date, a balance of $5,064.31, to meet the salaries of Professors, and defray the current expenses of the University for the remainder of the year 1859.

N. W. DEAN, *Treasurer.*

Report of Receipts and Disbursements by the Treasurer, from the 1st day of October, A. D. 1858, to the 30th day of September, A. D. 1859, inclusive.

RECEIPTS.

1858.	From what source.	Receipts.	Total.
October 1,	Cash on hand as per last report,........	$2,044 08	
October 1,	Received from "Bank of the Capitol," loan to Building Fund,..............	200 00	
November 1,	Received from "State Bank," loan to Building Fund,....................	1,000 00	
November 1,	Received from Income Fund,.	250 00	
November 1,	Received from S. Klauber, loan to Building Fund,...........	300 00	
December 1,	Received from L. B. Vilas, loan to Buildin Fund,...................... ...	500 00	
December 1,	Received from S. Klauber, loan to Building Fund,........................	200 00	
December 31,	Received fees from Students, per J. H. Lathrop,..........................	692 50	
1859.			
January 24,	Received from Building Fund,.........	1,000 00	
February 15,	Received from Income Fund,..........	3,000 00	
February 26,	....do..........do.................	2,000 00	
March 5,...	....do..........do........	3,630 59	
March 10,...	....do..........do.......	1,000 00	
March 19,...	....do..........do..................	6,308 62	
April 9,...	Received fees from Students, per J. H. Lathrop,.........................	629 00	
June 25,...	Received from Income Fund,...........	4,200 00	
July 11,...	Received from State Treasurer, loan to Building Fund, ...	10,000 00	
July 11,...	Received from Henry Barnard, loan to Building Fund,....................	3,000 00	
September 7,	Received fees from Students, per J. H. Lathrop,...........	563 00	
			$40,517 7

DISBURSEMENTS—*Treasurer's Report*—continued.

1858.	No. of War't.	To whom paid.	Amount.
October 2,	775	James Campbell,	$1,462 72
October 2,	776	James Campbell,	1,012 00
October 5,	763	Muldoon & Crampton,	26 75
October 9,	773	Aug. Kursteiner,	225 00
October 12,	762	Madison Gas Co.,	5 70
Novem. 25,	761	J. W. Sterling,	23 50
Novem. 25,	760	M. L. E. Brooks,	34 38
Novem. 27,	778	James Campbell,	1,031 44
Novem. 27,	777	Prof. J. D. Butler,	37 00
Decem. 7,	779	J. Chatterson,	212 00
Decem. 17,	781	William E. Cramer,	14 00
Decem. 17,	782	John N. Jones,	5 54
Decem. 17,	783	Crosby, Nichols & Co.,	10 00
Decem. 17,	784	R. R. Gibson,	3 50
Decem. 17,	785	American Express Co.,	1 50
Decem. 17,	786	J. Holton & Co.,	4 75
Decem. 17,	787	J. W Tolford,	1 50
Decem. 31,	791	J. H. Lathrop,	500 00
1859.			
Jan'y 18,	797	James Campbell,	1,188 09
Jan'y 19,	805	Madison Gas Co.,	4 50
Jan'y 19,	809	J. L. Pickard,	12 50
Jan'y 19,	811	Rufus King,	12 50
Jan'y 25,	771	J. W. Sterling,	318 06
Feb'y 7,	799	Est. of Wm. M. Hough,	26 85
Feb'y 7,	802	N. W. Dean, Treasurer,	35 00
Feb'y 9,	815	Franklin Rogers,	50
Feb'y 10,	816	James Campbell,	92 80
Feb'y 14,	790	J. D. Butler,	375 00
Feb'y 14.	770	E. S. Carr,	375 00
Feb'y 14,	789	E. S. Carr,	375 00
Feb'y 16,	817	James Herron,	299 25
Feb'y 16,	774	C. L. Williams,	62 50
Feb'y 16,	796	C. L. Williams,	62 50
Feb'y 16,	795	J. F. Smith,	162 50
Feb'y 16,	794	J. C. Pickard,	275 00
Feb'y 16,	803	Peter Newman,	176 93
Feb'y 16,	800	Dan'l Read,	12 92
Feb'y 16,	801	Dan'l Read,	10 70
Feb'y 16,	769	Dan'l Read,	375 00
Feb'y 16,	792	Dan'l Read,	375 00
Feb'y 16,	772	J. F. Smith,	139 72
Feb'y 17,	815	C. Schurz,	12 50
Feb'y 17,	793	J. W. Sterling,	375 00
Feb'y 17,	818	T. D. Coryell,	250 00
Feb'y 23,	780	H. C. Bull,	26 50
March 1,	819	Wm. Flannegan,	156 00
March 1,	788	Rice & Hart,	70 00
March 10,	810	C. Schurz,	12 50
March 10,	820	Calkins & Webb,	60 00
March 22,	822	Powers & Hoyt,	25 00
March 22,	823	Tibbits & Gordon,	73 34
March 22,	821	Bliss, Eberhard & Co.,	10 23
March 21,	824	H. C. Bull,	15 77
March 31,	825	J. D. Butler,	375 00

Treasurer's Report—continued.

1859.	No. of War't.	To whom paid.	Amount.
March 31,	831	C. L. Williams,	$62 50
March 31,	829	J. W. Sterling,	875 00
March 31,	830	J. C. Pickard,	250 00
April 4,..	826	E. S. Carr,	375 00
April 4,..	832	J. F. Smith,	162 50
April 4,..	828	D. Read,	375 00
April 8,..	808	Adams & Adams,	28 91
April 9,..	804	Colwell & Co.,	2 79
April 9,..	827	J. H. Lathrop,	500 00
April 16,..	834	Wm. Flannegan,	78 00
April 16,..	833	James Campbell,	63 50
April 16,..	834½	James Herron,	249 75
July 25,..	768	C. S. Mears & Co.,	144 11
July 25,..	835	S. Dean, Agent,	112 50
July 25,..	836	W. H. Wyman,	112 50
May 23,..	833	C. L. Williams,	78 17
May 23,..	837	Fuller, Ethridge & Co.,	17 01
May 29,..	844	N. W. Dean, Treas. to pay int. upon loans to Univ.,	406 00
May 29,..	845	N. W. Dean, Treasurer to pay int. upon loans,	8,630 59
May 29,..	847	L. W. Hoyt,	107 25
May 29,..	846	Edward Farley,	15 75
June 9,..	851	Henry Scheele,	21 00
June 9,..	852	Nicholas Omans,	22 50
June 14,..	850	Peter Newman,	66 69
June 23,..	853	C. Schurz,	15 00
June 23,..	854	M. M. Davis,	24 00
June 23,..	855	James Herron,	136 50
June 23,..	856	M. E. Fuller,	69 36
July 1,..	865	Wm. Flannegan,	78 00
July 1,..	857	Gas Co.,	2 40
July 1,..	858	J. D. Butler,	375 00
July 1,..	862	E. S. Carr,	875 00
July 1,..	863	Dan'l Read,	375 00
July 1,..	864	J. W. Sterling,	375 00
July 1,..	859	J. C. Pickard,	250 00
July 1,..	860	C. L. Williams,	62 50
July 1,..	861	J. F. Smith,	162 50
July 2,..	848	Joseph Chatterson,	104 00
July 10,..	806	E. Gibbs,	3 00
July 9,..	869	Robt. E. McBride,	20 00
July 9,..	839	John N. Jones,	9 61
July 9,..	840	Theo. Literary Journal,	6 00
July 9,..	841	American Express Co.,	1 50
July 9,..	842	J. C. Pickard	1 00
July 9,..	843	J. A. Ellis,	5 76
July 9,..	849	James Campbell,	22 97
July 9,..	866	John H. Lathrop,	458 33
July 9,..	868	James Campbell,	3 26
July 12,..	8	State Bank,	109 50
July 12,..	9	State Bank,	109 50
July 12,..	10	State Bank,	109 50
July 12,..	11	State Bank,	109 50
July 12,..	12	State Bank,	109 50
July 12,..	13	State Bank,	109 50
July 12,..	14	State Bank,	109 50

Treasurer's Report—continued.

1859.	No. of War't.	To whom paid.	Amount.
July 12...	15	State Bank,	$109 50
July 12...	16	State Bank,	109 50
July 12...	17	State Bank,	109 50
July 11...	46	H. A. Tenney,	108 53
July 11...	109	James Campbell,	106 97
July 11...	7	James Campbell,	109 47
July 11...	66	N. W. Dean,	108 64
July 11...	67	N. W. Dean,	108 64
July 11...	68	N. W. Dean,	108 64
July 11...	69	N. W. Dean,	108 64
July 11...	70	N. W. Dean,	108 64
July 11...	71	State Bank,	108 64
July 11...	72	State Bank,	108 64
July 11...	73	State Bank,	108 64
July 11...	74	State Bank,	108 64
July 11...	75	State Bank,	108 64
July 11...	111	State Bank,	108 64
July 11...	112	State Bank,	106 97
July 11...	113	State Bank,	106 97
July 11...	114	State Bank,	106 97
July 11...	115	State Bank,	106 97
July 11...	116	State Bank,	106 97
July 11...	117	State Bank,	106 97
July 11...	118	State Bank,	106 97
July 11...	119	State Bank,	106 97
July 11...	120	State Bank,	106 97
July 12...	54	Bank of the Capitol,	108 56
July 12...	55	Bank of the Capitol,	108 56
July 12...	56	Bank of the Capitol,	108 56
July 12...	99	Bank of the Capitol,	107 84
July 12...	100	Bank of the Capitol,	107 84
July 12...	4	James Campbell,	109 50
July 12...	38	James Campbell,	108 67
July 12...	52	James Campbell,	108 66
July 12...	18	Dane County Bank,	109 50
July 11...	19	Dane County Bank,	109 50
July 11...	20	Dane County Bank,	109 50
July 12...	21	Dane County Bank,	109 50
July 12...	22	Dane County Bank,	109 50
July 12...	23	Dane County Bank,	109 50
July 12...	24	Dane County Bank,	109 50
July 12...	25	Dane County Bank,	109 50
July 12...	26	Dane County Bank,	109 50
July 12...	27	Dane County Bank,	109 50
July 12...	40	James Campbell,	108 67
July 12...	64	James Campbell,	108 57
July 12...	65	James Campbell,	108 57
July 12...	93	James Campbell,	107 74
July 12...	95	James Campbell,	107 88
July 13...	34	James Campbell,	108 70
July 13...	35	James Campbell,	108 70
July 13...	37	James Campbell,	108 67
July 13...	43	James Campbell,	108 70
July 13...	44	James Campbell,	108 70
July 13...	45	James Campbell,	108 70
July 13...	51	James Campbell,	108 67

Treasurer's Report—continued.

1859.	No. of War't.	To whom paid.	Amount.
July 13...	134	James Campbell,	106 17
July 13...	141	S. Klauber,	107 00
July 13...	142	S. Klauber,	107 00
July 13...	143	S. Klauber,	107 00
July 13...	144	S. Klauber,	106 17
July 13...	145	S. Klauber,	106 17
July 20...	59	L. B. Vilas,	108 89
July 20...	60	L. B. Vilas,	108 89
July 20...	61	L. B. Vilas,	108 89
July 20...	62	L B. Vilas,	108 89
July 20...	63	L. B. Vilas,	108 89
July 20...	128	L. B. Vilas,	106 39
July 20...	129	L. B. Vilas,	106 39
July 20...	130	L. B. Vilas,	106 39
July 20...	131	L. B. Vilas,	106 39
July 20...	132	L. B. Vilas,	106 39
July 23...	41	James Campbell,	109 00
July 23...	42	James Campbell,	109 00
July 23...	48	James Campbell,	109 00
July 23...	49	James Campbell,	109 00
July 23...	5	James Campbell,	109 73
July 29...	867	H. C. Hobart,	30 00
July 29...	870	C. Schurz,	20 00
July 29...	871	M. M. Davis,	29 60
July 29...	872	Nelson Dewey,	20 00
July 29...	873	A. L. Castleman,	10 00
July 29...	874	J. C. Pickard,	20 00
July 29...	875	Henry Barnard,	656 25
July 29...	876	Samuel R. Fox,	79 78
July 29...	877	C. L. Williams,	166 66
Aug. 10...	878	Boarding Establishment,	82 77
Aug. 10...	879	James Campbell,	423 01
Aug. 10...	880	Carpenter & Hyer,	8 00
Aug. 20...	882	Governor's Guard Band,	75 00
Aug. 20...	883	R. B. Gibson,	3 50
Aug. 23...	884	M. L. E. Brooks,	17 88
Aug. 27...	885	J. F. Smith,	144 44
Aug. 29...	886	Samuel R. Fox,	42 39
Aug. 30...	887	Simeon Dean, Agent,	306 00
Aug. 30...	888	W. H. Wyman,	151 50
Sept. 3...	889	John H. Lathrop,	238 00
Sept. 3...	890	Madison Gas Company,	2 70
Sept. 9...	891	Michael Fahay,	13 00
Sept. 9...	891½	James Campbell,	2,580 00
Sept. 9...	881	Church and Hawley,	2 50
Sept. 24...	892	John Ford,	39 50
Sept. 24...	893	Matthew Newman,	15 50
Sept. 24...	894	Peter Omans,	20 00
Sept. 24...	895	Ann Reynolds,	6 75
Sept. 24...	896	Mary Mesick.	12 00
			$35,453 48
Sept. 30...		Balance in Treasury,	5,064 31
			$40,517 79

D.

REPORT OF THE AUDITING COMMITTEE.

The undersigned, comprising the Auditing Committee of the Board of Regents of the University of Wisconsin, respectfully report, that on the 30th day of September, 1859, they met at the office of the Secretary of the Board, and compared the warrants issued by the Secretary, with the books and vouchers therefor; and also the books and accounts of the Treasurer of said Board, with the warrants drawn on him by said Secretary, and certify to the Board of Regents aforesaid, that we found the same to be true and correct.

And we further certify, that the aforesaid Treasurer delivered to us, warrants paid by him during the fiscal year ending on said 30th day of September, amounting to the sum of $35,453.48, which were cancelled by us.

D. W. JONES,
Chairman pro tem. of Executive Committee.
J. D. RUGGLES,
Secretary of the Board of Regents.

MADISON, October 1, 1859.

E.

REPORT OF THE SECRETARY.

MADISON, October 1st, 1859.

To the Board of Regents of the University of Wisconsin:

The Secretary of the Board of Regents respectfully reports, that warrants have been drawn upon the Treasurer of the Board, during the fiscal year ending on the 30th day of September, 1859, as follows, to wit:

1858.	To whom issued.	What for.	Amount.
Oct. 2,..	Jas. Campbell, ...	Estimate on main edifice,........	$1,462 72
Oct. 2,..	Jas. Campbell, ...	Estimate on main edifice,........	1,012 00
Nov. 27,	J. D. Butler, ...	Salary, ...	37 00
Nov. 27,	Jas. Campbell, ...	Estimate on main edifice,.... ...	1,031 44
Dec. 4,.	J. Chatterson,.......	Supt. of main edifice, ...	212 00
Dec. 17,.	H. C. Bull,..........	Lumber, ...	26 50
Dec. 17,.	Wm. E. Cramer,.....	Publishing,.....................	14 00
Dec. 17,.	John N. Jones,......	Postage, ...	5 54
Dec. 17,.	Crosby, Nichols & Co.,	Blackwood and Foreign Reviews,.	10 00
Dec. 17,.	R. B. Gibson,........	Debates in Congress,...........	3 50
Dec. 17,.	Am. Express Co.,....	Express charges, ...	1 50
Dec. 17,.	J. Holton & Co.,.....	Charges on freight, ...	4 75
Dec. 17,.	J. W. Tolford, ...	Surveyor's poles,..............	1 50
Dec. 21,.	Rice & Hart, ...	North American Sylva, ...	70 00
Dec. 31,.	E. S. Carr,..........	Salary, ...	375 00
Dec. 31,.	J. D. Butler,.... ...	..do	375 00
Dec. 31,.	J. H. Lathrop,.......	..do	500 00
Dec. 31,.	Daniel Read,........	..do	375 00
Dec. 31,.	J. W. Sterling, ...	..do	375 00
Dec. 31,.	J. C. Pickard,.......	..do	275 00
Dec. 31,.	J. F. Smith,.........	..do	162 50
Dec. 31,.	C. L. Williams,......	..do .. as steward,............	62 50
1859.			
Jan. 10,	Jas. Campbell, ...	Estimate on main edifice,........	1,183 09
Jan. 10,	D. Appleton & Co.,..	Book of Engineering, ...	4 50
Jan. 11,	Estate of W. M. Hough,	Math. & drawing instruments,...	26 85

Secretary's Report—continued.

1859.	To whom issued.	What for.	Amount.
Jan. 11,	Daniel Read,........	Bal. due on books, library,.......	12 92
Jan. 11,	Daniel Read,........	Ex. meeting Regents of Nor. sch'ls,	10 70
Jan. 11,	N. W. Dean,.........	Int. on loan, to State Bank,.......	35 00
Jan. 11,	Peter Newman,......	Carpenter and joiner work, ...	176 93
Jan. 11,	Colwell & Co.,........	Chemicals for laboratory,........	2 79
Jan. 11,	Madison Gas Co.,.....	Gas consumed at City Hall,......	4 50
Jan. 11,	Edmund Gibbs,......	Lighting gas at exhibition,.......	8 00
Jan. 11,	I. E. Brown,........	Iron castings,.................	0 90
Jan. 11,	Adams & Adams,....	Merchandize,.................	28 91
Jan. 19,	J. L. Pickard,.......	Mileage and per diem as Regent,.	12 50
Jan. 19,	Carl Schurz, ...	Mileage and attendance as Regent,	12 50
Jan. 19,	Rufus King, ...	...do.........do........do....	12 50
Jan. 29,	R. B. Gibson,........	Congressional debates,..........	3 50
Jan. 29,	John N. Jones,......	Postage,.....................	0 70
Feb. 8,.	Carl Schurz, ...	Mileage and attendance as Regent,	12 50
Feb. 9,.	Frank Rogers,.	Posting bills, &c., ...	0 50
Feb. 9,.	Jas. Campbell, ...	Estimate on main edifice, ...	92 80
Feb. 15,.	Jas. Herron, ...	Wood, ...	299 25
Feb. 19,.	T. D. Coryell, ...	Salary, ...	250 00
Feb. 28,.	Wm. Flannegan,.....	..do.. as Janitor,..............	156 06
Mar. 14,	Calkins & Webb, ...	Printing,.....................	60 00
Mar. 18,	Bliss, Eberhard & Co.,	Stationery,....................	10 23
Mar. 22,	Powers & Hoyt, ...	Advertising, ...	25 00
Mar. 23,	Tibbits & Gordon,...	Hardware,......	73 34
Mar. 29,	H. C. Bull, ...	Lumber, ...	15 77
Mar. 31,	J D. Butler,........	Salary,.........	875 00
Mar. 31,	E. S. Carr,....	..do	375 00
Mar. 31,	J. H. Lathrop, ...	..do	500 00
Mar. 31,	D. Read,............	..do	375 00
Mar. 31,	J. W. Sterling, ...	..do	375 00
Mar. 31,	J. C. Pickard,.......	..do	250 00
Mar. 31,	C. L. Williams, ...	..do .. as steward, ...	62 50
Mar. 31,	J. F. Smith,.........	..do	162 50
April 15,	Jas. Campbell, ...	Estimate on main edifice,........	63 50
April 16,	Wm. Flannegan,.....	Services as Janitor,............	78 00
April 20,	Jas. Herron,.........	Wood, ...	249 75
April 25,	S. Dean, agent,......	Insurance premium, ...	112 50
April 25,	W. H. Wyman, agent,	....do......do	112 50
April 25,	Fuller, Ethridge & Co.	Merchandize,..................	17 01
April 25,	C. L. Williams, ...	Boarding establishment,.........	78 17
May 10,.	John N. Jones,......	Postage, ...	9 61
May 10,.	Theological Journal,.	Subscription,..................	6 00
May 10,.	Am. Express Co.,....	Express charges,.....	1 50
May 28,.	J. C. Pickard,.......	Bench for recitation room,.......	1 00
May 28,.	J. A. Ellis, assignee,.	Merchandize, ...	5 76
May 28,.	N. W. Dean, treasurer	Int. and ex. on loan from Ledyard,	406 00
May 28,.	N. W. Dean, treasurer	Int. on loans to University,......	3,630 59
May 31,.	Edward Farley, ...	Wood, ...	15 75
May 31,.	L. W. Hoyt,.........	..do	107 25
June 1,	Jos. Chatterson,.....	Supt. of main edifice, ...	104 00
June 4,	Jas. Campbell, ...	Estimate on main edifice,........	22 97
June 8,	Peter Newman,......	Carpenter and joiner work, ...	66 69
June 9,	Henry Scheeley,.....	Labor with team, ...	21 00
June 9,	Nicholas Omans,.....	Labor on University grounds, ...	22 50

Secretary's Report—continued.

1859.	To whom issued.	What for.	Amount.
June 23,	Carl Schurz, ...	Mileage and attendance as Regent,	15 00
June 23,	M. M. Davis, ...	...do.... .. .do........do ...	24 00
June 23,	Jas. Herron, ...	Wood, ...	136 50
June 23,	M. E. Fuller, ...	Groceries, boarding establishment,	69 36
June 29,	Madison Gas Co., ...	Gas consumed, City Hall, ...	2 40
June 30,	J. D. Butler, ...	Salary, ...	375 06
June 30,	J. C. Pickard, ...	..do	250 00
June 30,	C. L. Williams, ...	..do ... as steward, ...	62 50
June 30,	J. F. Smith, ...	..do	162 50
June 30,	E. S. Carr, ...	..do	375 00
June 30,	D. Read, ...	..do	375 00
June 30,	J. W. Sterling, ...	..do	375 00
June 30,	Wm. Flannegan, ...	..do ... as Janitor, ...	78 00
June 30,	J. H. Lathrop, ...	..do	458 33
July 2,	Jas. Campbell, ...	Estimate on main edifice, balance,	3 26
July 9,	Robt. E. McBride, ...	Shade trees, ...	20 00
July 29,	H. C. Hobart, ...	Mileage and attendance as Regent,	30 00
July 29,	Carl Schurz, ...	...do..........do.......do.....	20 00
July 29,	M. M. Davis, ...	...do..........do.......do.....	29 60
July 29,	Nelson Dewey, ...	...do.. ......do.......do.....	20 00
July 29,	A. L. Castleman, ...	...do..........do.......do.....	10 00
July 29,	J. L. Pickard, ...	...do...... ...do.......do.....	20 00
July 29,	Henry Barnard, ...	Salary as Chancellor, ...	656 25
July 30,	S. R. Fox, ...	Hardware, ...	79 78
Aug. 1,	C. L. Williams, ...	Salary as steward, ...	166 66
Aug. 1,	Boarding establishm't	Board of Mr. Fallows, ...	82 77
Aug. 5,	Jas. Campbell, ...	Account of main edifice, ...	423 01
Aug. 6,	Carpenter & Hyer, ...	Printing schemes, ...	8 00
Aug. 6,	Church & Hawley, ...	Table for University, ...	2 50
Aug. 20,	Gov. Guard Band, ...	Music furnished, one year, ...	75 00
Aug. 20,	R. B. Gibson, ...	Congressional debates, ...	3 50
Aug. 23,	M. L. E. Brooks, ...	Labor and materials, ...	17 88
Aug. 27,	J F. Smith, ...	Salary, ...	144 44
Aug. 29,	S. R. Fox, ...	Hardware, ...	42 39
Aug. 30,	S. Dean, agent, ...	Insurance premium, ...	306 00
Aug. 30,	W. H. Wyman, agent,	....do........do	151 50
Sept. 3,	J. H. Lathrop, ...	Salary, ...	338 00
Sept. 3,	Madison Gas Co., ...	Gas consumed, City Hall, ...	2 70
Sept. 9,	Michael Fahay, ...	Labor on University grounds, ...	13 00
Sept. 9,	Jas. Campbell, ...	Estimates on main edifice, ...	2,580 00
Sept. 24,	John Ford, ...	Painting and cleaning, ...	39 50
Sept. 24,	Mathew Newman, ...	...do.........do	15 50
Sept. 24,	Peter Omans, ...	...do.........do	20 00
Sept. 24,	Ann Reynolds, ...	Cleaning buildings, ...	6 75
Sept. 24,	Mary Messick, ...	...do......do	12 00
Sept. 30,	J. D. Butler, ...	Salary, ...	375 00
Sept. 30,	J. C. Pickard, ...	..do	250 00
Sept. 30,	J. W. Sterling, ...	..do	375 00
Sept. 30.	D. Read, ...	..do	375 00
Sept. 30,	Henry Barnard, ...	..do	437 50
Sept. 30,	E. S. Carr, ...	..do	375 00
	Total, ...	....	$26,317 76

The foregoing list of warrants, issued during the last fiscal year, may be appropriately classified and charged to the following sources, to wit:

Salaries,	$11,146 02
Mileage and attendance of Regents,	218 60
Main edifice,	8,195 79
Contingent expenses and repairs,	819 44
Wood,	808 00
Printing and publishing,	107 00
Postage,	15 85
Stationery,	10 23
Library,	140 77
Insurance,	682 50
Interest,	4,071 59
Boarding establishment,	601 47
Total,	$26,817 76

In accordance with a resolution adopted by the Board of Regents, at a meeting held in July, 1858, the following warrants, payable eight months after date, and bearing interest at the rate of ten per cent. per annum, have been drawn upon the Treasurer of the Board, on the credit of the building fund, to aid in the erection of the main edifice (now "University Hall") of the University.

Chapter 25, of the General Laws of 1857, authorizes the Board of Regents to borrow from the principal of the University fund, a sum not exceeding $40,000, for the purpose of erecting the main edifice of the State University, and as but quite a small portion of this sum has as yet been derived, said warrants have been issued in anticipation of a sufficient amount of the principal of the fund now due, and to become due in 1860, being paid to redeem such warrants when matured.

1858.	To whom issued.	Numbers.	Amount.
October, 1,..	James Campbell, ...	Nos. 94 to 98 inclusive	$500 00
October, 1,..	Bank of the Capitol,........	do 99 to 100...do...	200 00
November 1,	James Campbell, ...	do 101 to 110...do...	1,000 00
November 1,	State Bank,..............	do 111 to 120...do...	1,000 00
November 1,	James Campbell, ...	do 121 to 127...do...	700 00
December 1,	Levi B. Vilas,.............	do 128 to 132...do...	500 00
December 1,	James Campbell, ...	do 133 to 140...do...	800 00
November 1,	S. Klauber, ...	do 141 to 145...do...	500 00
1859.			
January 1,..	James Campbell, ...	do 146 to 163...do...	1,800 00
April 1,.....	James Campbell, ...	do 164 to 177...do...	1,400 00
May 1,......	James Campbell, ...	do 177½ to 201...do...	2,500 00
June 1,.....	James Campbell, ...	do 202 to 208...do...	700 00
July 1,.....	James Campbell, ...	do 209 to 215...do...	700 00
July 1,.....	Henry Barnard, ...	do 216 to 245...do...	3,000 00
September 1,	James Campbell, ...	do 246 to 248...do...	300 00
	Total,....................	....	$15,600 00

The condition of the University fund on the 30th day of September, 1859, as appears from the annual report of the Secretary of State, was as follows:

Amount due on certificates of sale,	$248.483 02
Amount due on loans,	52,242 20
Total productive fund,	$300,725 22
Balance in Treasury,	3,198 38
	$303,923 60

The productive principal above exhibited, is drawing interest at the rate of seven per cent. per annum, which interest constitutes

THE UNIVERSITY FUND INCOME.

This income is annually applied towards defraying the expenses of the University.

The amount above designated as productive is	$300,725 22	
The interest upon which sum, at seven per cent. per annum, amounts to		$21,050 76
Add income in State Treasury, September 30th, 1859,		501 04
Total,		$21,551 80

This amount is subject to be drawn by the Treasurer of the University during the current fiscal year.

The productive portion of the University fund, is subject, however, to constant fluctuation, and the income receivable for the year 1860, may be somewhat less than shown by the foregoing figures.

The report of the Treasurer will exhibit, in detail, a statement of the moneys received and disbursed by him during the last fiscal year, from which it will appear that on the 30th ult., there was a balance of $5,064.31 belonging to the University.

Very respectfully,
J. D. RUGGLES,
Sec'y of Board of Regents.

F.

REPORT OF BUILDING COMMITTEE.

To the Board of Regents:

GENTLEMEN—The undersigned, Building Committee of the State University, intrusted with the charge of erecting the central edifice of said institution, herewith submit their report:

After a delay of more than one year beyond the time originally contemplated, and passing through and surmounting perpetual embarrassments and difficulties from the commencement, we are enabled to announce, with a feeling of relief and satisfaction, that the central edifice is finally completed and ready for the uses for which it was intended.

The several items of cost involved in said work, both by contract and otherwise, will be found in tables annexed hereto, marked "A," "B," "C," &c., respectively. From these it will be seen that the whole cost of the building exceeds the original contract price in the sum of $9,211.20. Reports showing the nature and character of these additional expenditures have, from time to time, been made to and approved by the Board. A brief recapitulation, therefore, will suffice here.

At the first proposed letting of the contract for this building in June, 1857, upon the plan adopted by the Board, every bid made exceeded the total appropriation of the work ($40,000) by from three to twelve thousand dollars. To reduce the contract price within the means of the Board a number of material modifications and omissions were made, and the contract finally let in the belief that these necessary fixtures could be added from the surplus income. The total contract, as let, less these extras or omissions, amounted to $36,550.

But at the moment of commencing, one of these extra jobs became at once apparently necessary. The plan contemplated only a very small cellar room sufficient only for holding the furnaces, but made no provision for room for fuel, storage, &c., of absolute necessity to such a structure. The committee, as a duty to the Board, directed the cellar to be made under the whole building. This required an addition of two feet height to the cellar walls; and, indeed, two additional feet became necessary above the basement, making four feet additional height of walls to the whole building. The contract called only for 2 x 8 joist and timber in the building; but it was at once apparent that the size would not answer; and 2 x 12 was substituted throughout, increasing considerably the bill of lumber. The contract, also, only called for completing and finishing the edifice for use to the upper or attic story. Had it been left in this shape, the natural history room, society rooms, &c., would have been left without lathing or plastering, as also the dome, and a part of the rotunda. The committee, in the exercise of a sound discretion, have had this work finished uniformly, with the balance of the building. They also substituted slate for shingles for the roof; and have had considerable work done in making head-lights to doors to light the halls, fixing cistern to laboratory, tubing for conveying water, building additional stairways, lath above and below, providing areas and stone steps to cellar windows and doors—in short, have finished the work as was originally contemplated by the Board, believing they could do no less and be faithful to the trust placed in their keeping.

The history of their financial affairs is one of continuous embarrassment. Had the condition of the treasury been anticipated, and a contract not been let and work commenced before the panic of 1857, prudence would have dictated a postponement of this work to a more propitious season. But having entered into contracts in good faith under a law of the State authorizing it, they could do no less than proceed, using all diligence to protect the interests of the institution, while keeping sound the obligation of contracts. Had good faith been observed towards the Board at the commencement, and the sum of about seventeen thousand dollars, reported as in the State treasury when the original act authorizing the work, passed, not been taken from them without their knowledge or consent, and loaned out, no difficulties would have beset this work. So, also, had the loan made to the Board at the last session of the Legislature been wholly paid, the relief would have been adequate. As the case has stood, the work has been carried on, very largely, with University warrants, on eight months' time, which by the efforts of interested parties, have at times been depreciated from five to fifteen per cent., much to the detriment of the contractor who received them at par. Still, with all the drawbacks of lack of funds, and the necessities of some sacrifices, it is ever confidently believed that no public building in the State, of its size, has ever been erected as cheaply as this has. And in proof of their sincerity in this assertion they confidently invite the careful scrutiny of the Board, the Legislature, and all others of competent knowledge, fully and without reserve.

The total cost of University Hall, as per exhibits annexed, has been as follows:

Contract with Jas. Campbell	$36,550 00
Bill of additional or extra work and material for carpenter work as per schedule "A"	5,888 23
Bill of additional labor and materials for mason work as per schedule "B"	3,322 97
Total cost	$45,761 20

Of which sum there has been paid—

In cash on cash warrants	$25,365 02
In time warrants now out	19,783 73
Balance due at date	612 45

Making total present indebtedness at date $20,396.18, bearing (when all issued) ten per cent. interest. But as the University is receiving seven per cent. from its funds, the real extra outlay in interest is three per cent, or $611.88 per annum on this indebtedness.

No additional appropriation will be wanted from the State to meet this liability, if the balance of the loan authorized at the last session can be realized. Indeed, it is submitted whether sound policy does not require the appropriation of the whole surplus revenue of the institution to this end, and the making that surplus as large as possible until it is paid off. This can be accomplished by suspending all appropriations for a season, creating a sinking fund, and in the end extinguishing the debt, leaving the principal intact. By setting aside $5,000 annually, five years will extinguish this debt and leave the University thenceforward free, with a handsome and increasing revenue.

It is believed to be the policy and duty of the Board to so manage this trust, now that the necessary buildings are erected, as to pay off all indebtedness in the shortest time practicable, and to make temporary sacrifices to that end.

All of which is respectfully submitted.

H. A. TENNEY, *Chairman.*

"A."

Account of Extra Labor and Materials on Central Building of the University of Wisconsin.

	Claimed.	Deducted.
For 15,850 feet lumber, increase in floor timbers, including rafters and studding $30	475 50	
Slate roof as per contract	500 00	
120 feet partition in wings, trussed on two sides, 2 50	300 00	
41 windows in first story enlarged 16 inches, 2 50	102 50	
428 feet furring and partition in 4th story, ...50c	214 00	
Trussing timbers for gallery in fourth story	115 00	
73 feet railing " " " ..$4 50	328 50	
Labor in floor timber and joists	78 00	
15 feet screen in each wing, (roof)	35 00	
39 doors, (extra number) complete $26	1,014 00	80 00
6 openings cased and trimmed on 1st floor 20	120 00	
38 door frames (pannelled) 4	152 00	
69 head lights $3 50	241 50	
36 frames for head lights 3 25	117 00	
24 cellar window frames, sash, glass and paint, 6 25	150 00	
6 door frames in cellar $2	12 00	
1 flight cellar stairs, in labratory	47 50	
765 feet plain base. $16	122 40	
451 feet pan'ld do per C $32	144 52	
38 treads in main stairs in upper story $7	231 00	
34 windows trimmed inside in 4th " $2 50	85 00	
74 feet railing in rotunda. $4	296 00	
4 brackets in gallery $10 50	42 00	
Floor, door, and steps at head of main stairs,	47 50	
In Fifth Story of Rotunda.		
676 feet flooring and floor timbers $30	20 28	
440 feet joists 20	8 80	
1,534 feet scantling 20	30 68	
1,740 feet ceiling joists 20	34 80	
4 kegs nails. $4 50	18 80	
Labor on the above items in 5th story 100	100 00	
Painting	18 00	
116 feet ventilating tubes in wings 25c	29 00	
Alterations in same, directed by Dr. Reid	30 00	
248 feet ventilating tubes in main part 50c	124 00	
130 extra in size do do, out through dome	176 25	109 00
Setting ventilators and registers	35 50	
Panelling and painting portico ceiling	20 00	
Making reservoir with feed and waste pipes	187 00	
4 water conductors on wing, 96 feet, ... 25c	24 00	24 00
Putting up conductors	25 00	
440 feet wood tubing under ground 15c	66 00	
Wind guage and fixtures	155 00	
Painting and sanding Frieze	68 00	
Less.		
Deduct price of piazza floor, included in contract, $40		40 00
Deduct am't disallowed on first page		213 00
By balance carried down		5.888 23
	$6,141 23	$6.141 23
By balance brought down		$5,888 23

"A"—continued.

I hereby certify that I have examined and measured up the several items in the foregoing bill, and that the several amounts thereof of materials or otherwise are correct; that they are legitimate extra charges for work necessarily done on the central university edifice, according to orders from the Building Committee, or other competent authority, and that the charges made are just and reasonable, and in proportion, similar, to the work done under the contract on said building, by the contractor thereon.

(Signed) JOSEPH CHATTERSON,
Superindending Architect of the Central Edifice of the University of Wisconsin.

We, the undersigned, have examined the foregoing bill, item by item, and being satisfied of its correctness, freely approve the same.

(Signed) H. A. TENNEY, Ch'n Building Committee.
N. W. DEAN.

"B."

Account of Extra Labor and Materials, (Mason work and Plastering) on Central Building of the University of Wisconsin.

	Claimed.	Deducted.
For raising walls all around building, 4 feet, at $339 28 per foot, as per agreement	1,357 12	
134 perch added to thickness of wall ... $2	268 00	
566 yards plastering in in wing partitions ... 32c	181 12	
1,586 " " in lathed walls in attic ... 32c	506 88	
519 " " on stone wall " ... 20c	103 80	
442 feet plaster cornice in rotunda ... 15c	66 30	
68 " blocking in cornice of do ... 20c	13 60	
88 " ribbing in ceiling of do ... 25c	22 00	
Plastering cellar stair way to labratory	1 60	
Tearing off lath and relathing doors and flues, and 12 days labor and lath included	27 00	
12 stone pillars in cellar, 65 1-2 perch ... $2	131 00	
240 feet caps and sills to cellar windows ... 25c	60 00	
11 2-12 feet caps for cellar doors	2 80	
124 perch stone in window areas to cellar ... $2	248 00	
348 feet capping on areas in cellar ... 35c	121 80	
90 " do for cellar doors ... 35c	31 50	
179 " do cellar steps, stone ... 35c	62 65	
37 perch of stone for cellar way walls ... $2	74 00	
25 perch of stone for under cellar steps to cellar ... 12s	37 50	
800 brick in paving areas ... 8s	8 00	
22 feet capping to window in areas ... 35c	7 70	
9 perch stone wall to area ... $2	18 00	
8 scraper blocks, stone ... 12s	12 00	
Fitting and hanging cellar doors, 3½ days labor, ... $2	7 00	
12 lbs bar lead ... 10c	1 20	
Digging window areas (21 days labor) ... $1	21 00	
Cutting three windows in cellar wall ... $3	9 00	
" one door " " ... $3	3 00	
Cutting walls for water pipe, 4 1-2 days ... $2	9 00	
Filling around doors, mason labor 12 1-2 days ... $2	25 00	
Labor for the same 6¼ days ... $1	6 25	
Setting thimbles & clearing flues, mason 13½ days, $2	27 00	
Labor 4 days ... $1	4 00	
74 thimbles ... 4s	37 00	
Laying up two flues and cutting away wall, mason work 16 days ... $2	32 00	
Laborer 11 days ... $1	11 00	
140 feet tin lining in flues ... 2s	52 50	
25 bushels of lime (for flues) ... 2s	6 25	
4 loads sand " ... 4s	2 00	
3600 brick in flues in wings (extra) ... $5	18 00	
Less.		
Deduct 375 yards plastering on stone wall (included in contract) ... 20c		74 60
118 perch stone (included in contract) ... $2		236 00
By balance carried down		3,322 97
	$3,633 57	$3,633 57
Amount brought down		$3,322 97

"B"—continued.

I hereby certify that I have measured and examined the several items in the foregoing bill, and that the several amounts thereof of materials or otherwise, are correct:—that they are legitimate extra charges for work necessarily done on the central university edifice, according to orders from the building committee or other competent authority, and that the charges made, are just and reasonable and similar in proportion to the work done under the contract on said work, by the contractor thereon.

(Signed) JOSEPH CHATTERSON,
Superintending Architect of the central edifice of the State University.

We, the undersigned, have examined the foregoing bill, item by item, and being satisfied of its correctness, hereby approve the same.

(Signed) H. A. TENNEY, Ch'n Building Com.
N. W. DEAN.

"O."

CASH WARRANTS.

Date.	No.	To whom issued.	On what account.	Amount.
Oct. 5, 1857.	629	James Campbell,	Acc't of 1st estimate	$3.156 34
Nov. 25, 1857.	654	Same	..do....2nd....do.	4,000 87
Feb. 16, 1858.	680	Same	..do....3d.....do.	200 00
Feb. 16, 1858.	681	Same.	..do....3d.....do.	335 60
April 7, 1858.	706	C. H. Luce	Lumber,	1,085 00
April 7, 1858.	708	H. O. Bull	....do.	167 86
May 22, 1858.	713	James Campbell	Acc't of 2d estimate	1,756 76
June 7, 1858.	726	Same	..do... 3d.....do.	669 39
July 31, 1858.	748	Same	..do....4th.....do	1,408 69
Aug. 14, 1858.	752	Same	..do....5th.....do.	978 79
Sept. 30, 1858.	767	C. S. Mears & Co.,	Lumber	1,041 66
Oct. 2, 1858.	775	James Campbell	Acc't Aug. estimate	1,462 72
Oct. 2, 1858.	776	Same	..do..Sept.....do.	1,012 00
Nov. 27, 1858.	778	Same	..do..Oct......do	1,031 44
Jan. 10, 1859.	797	Same	..do..Nov..... do	1,088 09
Feb. 10, 1859.	816	Same	..do..Dec...... do.Bal.	92 80
Apr. 15, 1859.	833	Same	..do....11th...do...do	63 50
June 4, 1859.	849	Same.	..do....12th...do...do	22 97
July 2, 1859.	868	Same.	..do....13th...do...do	3 26
Oct. 10, 1859.	906	Francomb & Gifford	..do..Painting	200 00
Oct. 22, 1859.	911	James Campbell	..do....14th...do.	400 00
Oct. 25, 1859,	912	Sharpe & Oakley	..do..Plastering	558 89
			Total....	20,836 63
Sept. 9, 1859	891½	James Campbell	..do..estimate	2,580 00
Dec. 20, 1859.	914	Same.	..do..final estimate	760 00
Jan. 7, 1860.	929	Same.	..do....do....do.	288 39
Jan. 24, 1860.	934	Same	..do....do....do	900 00
			Total....	25,365 02

"D."

TEN PER CENT WARRANTS (Due eight months after date.)

Date.	To whom issued.	Numbers.	Amount.
Aug. 1, 1858.	James Campbell......	1 to 7 inclusive.... 7	700 00
Sept. 1, 1858	Same..............	34 to 45....do.......12	1,200 00
Sept. 4, 1858.	Same..............	48 to 53....do....... 6	600 00
Sept. 1, 1858.	Same..............	64 to 65....do....... 2	200 00
Sept. 30, 1858.	Same..............	76 to 88....do.......13	1,283 73
Sept. 1, 1858.	Same..............	89 to 93....do....... 5	500 00
Oct. 1, 1858.	Same..............	94 to 98....do....... 5	500 00
Nov. 1, 1858.	Same..............	101 to 110....do.......10	1,000 00
Nov. 1, 1858	Same..............	121 to 127....do....... 7	700 00
Dec. 1, 1858.	Same..............	133 to 140....do....... 8	800 00
Jan. 1, 1859.	Same..............	146 to 163....do.......18	1,800 00
April 1, 1859.	Same..............	164 to 177....do.......14	1,400 00
May 1, 1859.	Same..............	177½ to 201....do.......25	2,500 00
June 1, 1859.	Same..............	202 to 208....do....... 7	700 00
July 1, 1859.	Same..............	209 to 215....do....... 7	700 00
Sept. 1, 1859.	Same..............	246 to 248....do....... 3	300 00
		Total...	14,883 73
Dec. 1, 1859.	Same..............	251 to 255....do....... 5	500 00
Dec. 1, 1859.	Same..............	256 to - ....do....... 1	900 00
Dec. 1, 1859.	Same..............	257 to 291....do.......35	3,500 00
		Total...	19,783 73

"E."

Mr. James Campbell, Contractor for Building the Central Edifice of the University of Wisconsin, in Account with the Board of Regents of the University of Wisconsin:

		Dr.	Cr.
	By amount specified in contract executed between said Campbell and the building committee of the Board of Regents, August 23, 1857,		36,550 00
	By bill for extra labor and materials, for said building, as per schedule "A" herewith,		5,888 23
	By bill for extra labor and materials, for mason work on said building, as per schedule "B" herewith,		3,322 97
			$45,761 20
	For amount of cash warrants received, as per list herewith annexed, marked "C,"	$25,365 02	
	For amount of University warrants payable eight months after date, drawing interest at the rate of ten per cent per annum, as per list hereto annexed, marked "D,"	19,783 73	
	Total,	$45,148 75	
	To amount to balance, carried down,	612 45	
		$45,761 20	45,761 20
1860 Feb. 10.	By Balance Bro't down and due,		612 45

UNIVERSITY OF WISCONSIN,
Secretary's Office,
Madison, February 10, 1860.

I hereby certify that the foregoing is a correct copy of the account on file in my office, of Mr. James Campbell with the Board of Regents of the University of Wisconsin.

J. D. RUGGLES, *Secretary.*

G.

CATALOGUE AND CIRCULAR

OF THE

WISCONSIN STATE UNIVERSITY,

FOR THE

Year Ending September 30, 1859.

BOARD OF REGENTS.

HENRY BARNARD,	Chancellor, *ex-officio*,	Madison.
DAVID W. JONES,	Secretary of State, *ex-officio*,	Madison.
LYMAN C. DRAPER,	Sup't of Pub. Inst., *ex-officio*,	Madison.
ALFRED L. CASTLEMAN,	Term expires Jan. 1861,	Milwaukee.
NATHANIEL W. DEAN,	" "	Madison.
SAMUEL L. ROSE,	" "	Watertown.
LEVI B. VILAS,	" "	Madison.
JOHN G. McMYNN,	Term expires Jan. 1863,	Racine.
JOSIAH L. PICKARD,	" "	Platteville.
CARL SCHURZ,	" "	Milwaukee.
HORACE A. TENNEY,	" "	Madison.
O. M. CONOVER,	Term expires Jan. 1865,	Madison.
MOSES M. DAVIS,	" "	Portage City.
NELSON DEWEY,	" "	Cassville.
HARRISON C. HOBART,	" "	Chilton.
JAMES D. RUGGLES,	*Secretary*,	Madison.
NATHANIEL W. DEAN,	*Treasurer*,	Madison.

FACULTY.

HENRY BARNARD, LL D.,
CHANCELLOR.

..................................*
Professor of Ethical and Political Science.

DANIEL READ, LL.D.,
Professor of Mental Science, Logic, Rhetoric and English Literature.

JOHN W. STERLING, A.M.,
Professor of Mathematics and Natural Philosophy.

EZRA S. CARR, M.D.,
Professor of Chemistry and Natural History

DAVID BOSWELL REID, M.D., F.R.S.E.,
Professor of Physiology, and Hygiene, and Director of Museum of Practical Science.

JAMES D. BUTLER, A.M.,
Professor of Ancient Languages and Literature.

JOSEPH C. PICKARD, A.M.,
Professor of Modern Languages and Literature.

THOMAS D. CORYELL, A.M.,
Instructor in Surveying and Engineering.

DAVID H. TULLIS,
Instructor in Commercial Calculations and Book-keeping.

O. M. CONOVER. A.M.,
Principal of Preparatory Department in Public High School.

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* Vacant by the resignation of J. H. Lathrop, LL D.

FACULTY.

HENRY BARNARD, LL.D.,
CHANCELLOR.

. . . . *
Professor of Moral and Political Science.

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Professor of Mental Science, Logic, Rhetoric and English Literature.

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Instructor in Commercial Calculations and Book-keeping.

O. M. CONOVER, A.M.,
Principal of Preparatory Department in Public High School.

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* Vacant by the resignation of J. H. Lathrop, LL.D.

GRADUATING CLASS, JULY, 1859.

NOTE.—C, Classical; S, Scientific; P, Preparatory; †, Studying Latin.

NAME.	COURSE.	RESIDENCE.
ALEX. C. BOTKIN,	C	Madison.
HILL C. BRADFORD,	S	Culpepper Co., Va.
LEONARD S. CLARK,	C	San Francisco, Cal.
SAMUEL FALLOWS,	C	Hanchettville.
EDWARD B. GUILD,	C	Madison.
ELBERT O. HAND,	C	Lyons.
EDWIN MARSH,	C	Beaver Dam.
PHILIP C. SLAUGHTER,	S	Culpepper C. H., Va.

UNDERGRADUATES.

(ALPHABETICALLY ARRANGED.)

Note.—C, Classical; S, Scientific; P, Preparatory; †, Studying Latin.

NAME.	COURSE.	RESIDENCE.
John S. Abbott,	P	Madison.
Geo. A. Abert,	S †	Milwaukee.
Gideon W. Allen,	S †	Trempeleau.
Richard Armstrong,	S †	Rome, N. Y.
Benj. D. Atwell,	P	Madison.
Wm. P. Atwell,	P	"
J. Schuyler Babcock,	S	Columbus.
Benj. T. Bailey,	S	Trenton.
Nelson R. Bailey,	S	Sun Prairie.
Farlin Q. Ball,	S †	Monroe.
William H. Ball,	P	"
M. Irving Barker,	S	Oregon.
Elisha H. Biggs,	P	Williamsport, Penn.
Moses Billings,	S	Columbus.
George W. Bird,	C	Madison.
Duane D. Bird,	S	"
Dennis Birdsey,	S	Columbus.
John W. Blake,	S †	Jefferson.
Thomas Bohan,	S	Hartford.
Harrison Bolender,	S	Oreco, Ill.
William A. Booth,	P	Madison.
Wilmot A. Booth,	P	"
Alfred L. Bostedo,	S †	Weyauwega.
Alex. C. Botkin,	C	Madison.
Cyril H. Brackett,	S †	"

NAME.	COURSE.	RESIDENCE.
Hill C. Bradford,	S †	Culpepper Co., Va.
Orville T. Bright,	S †	Elkhorn.
Lowndes Brisbane,	P	Madison.
James B. Britton,	C	"
Arthur L. Brooks,	C	"
Charles C. Brown,	S	Cambridge.
Elliott K. Brown,	S	Fond du Lac.
Harvey M. Brown,	P	Columbus.
Hobart Brush,	S	Waterloo.
James D. Butler, jr.,	P	Madison.
Cary M. Campbell,	S †	"
Ezra M. Carr,	S †	"
Ezra S. Carr, jr.,	P	"
William W. Church,	C	"
Geo. F. Clark,	S †	Lamartine.
James Clark,	S	Montrose.
Lewis J. Clark,	S	Colburn.
Leonard S. Clark,	C	San Francisco, Cal.
Peter Clark,	S	Montrose.
Samuel P Clark,	S †	"
Thomas H. Clay,	S †	Lexington, Ky.
Henry B. Clay,	S	"
Webster J. Colburn,	S	Jefferson.
Leander M. Comins,	C	East Eddington, Me.
Hugh D. Cox,	S	Milford.
Ezekiel L. Craton,	P	Monroe.
Ambrose B. Curtis,	C	Madison.
Joseph Curtis,	P	Richland.
William S. Davenport,	C	Monroe.
Henry C. DeForest,	C	Madison.
John Dow,	S	Cambridge.
Henry Duffy,	S †	Fayette.
Lewis F. Dunn,	P	Elk Grove.
Charles O. Eaton,	P	Madison.
Brazier Ellis,	S	Westport.
Jonas B. Everett,	S	Stone Mills, N. Y.
Samuel Fallows,	C	Hanchettville.
Albert D. Folsom,	S	Waterloo.
Herrick A. Forbes,	S	Cascade.
Philander W. French,	S †	Fitchburg.

NAME.	COURSE.	RESIDENCE.
Andrew Gardner,	C	Weyauwega.
Henry Gardner.	C	Burke.
Almerin Gillett,	S †	Geneva.
Ery C. Gillett,	S	Oreoo, Ill.
Arthur Gleason,	P	Madison.
Henry L. Gray,	S †	"
Charles G. Greenwood,	S	Abbott, Me.
Milton S. Griswold,	C	Waukesha.
Edward B. Guild,	C	Madison.
Thoms J. Hale,	C	Racine.
Azariah S. Hall,	C	Hanchettville.
Joseph G. Hall,	P	Monroe.
Paul Halverson,	S	Cottage Grove.
Elbert O. Hand,	C	Lyons.
John E. Hand,	S †	"
Clement L. Hart,	S	Hulisford.
Louis N. Hanck,	S †	Belloville, Ill.
James B. Hayes,	S	Ashipun.
Thoms M. Haynes,	C	Black Earth.
John W. Heathcock,	S	Linden.
Henry H. Helms,	P	Fitchburg.
Stacy Hemenway,	S	Eugene City, Oregon.
Robert H. Henry,	S	Verona.
Charles A. Hoover,	P	Milwaukee.
George B. Hopkins,	P	Madison.
George L. Hopson,	P	Le Claire, Iowa.
Elijah D. Hunt,	S	Madison.
Addison C. Jackson,	P	"
William S. Jackson,	P	"
Jay Jennings,	P	Caledonia.
Charles D. Jones,	P	"
William C. Jones,	P	"
E. Herman Jones,	S	Oconomowoc.
William H. Keepers,	P	Madison.
Clarence Kellogg,	P	"
Michael Leahey,	C	Portland.
John Leahey,	S	"
Charles W. Leavens,	C	Caldwell's Prairie.
Herbert A. Lewis,	P	Windsor.
Fielding Mansfield,	S †	Madison, Indiana.

NAME	COURSE.	RESIDENCE.
Edwin Marsh,	C	Beaver Dam.
Robert Mac McBride,	S †	Mansfield, Ohio.
John R. McConnell,	P	Madison.
Aaron McCracken,	S †	Monroe.
Andrew J. McFarlane,	C	Portage.
Jefferson C. McKinney,	P	North Leeds.
James M. Mead,	S †	Whitewater.
Edward G. Miller,	P	Sweet Home.
Milton T. Morris,	P	Maquoteta, Iowa.
George W. Morse,	S	Bellville.
Eugene A. Nash,	C	Dayton, N. Y.
Lucas W. Needham,	P	Winona, Minn.
William L. O'Connor,	S †	Clayton.
Obed A. Palmer,	C	Milwaukee.
John B. Parkinson,	C	Fayette.
John D. Parkinson,	C	Madison.
Louis J. Patch,	S	St. Peter, Minn.
Rollin E. Pierce,	S	Pierceville.
Myron S. Piper,	S	Madison.
George K. Powers,	P	"
William P. Powers,	C	"
Volney Rattan,	S †	Morefield.
Otis Remick,	S	Cornish, Me.
Aldis L. Rockwell,	P	Springfield.
Antinous A. Rowley,	S	Verona.
Harrison W. Sigworth,	S †	Fryburg, Pa.
Philip C. Slaughter,	S †	Culpepper C. H, Va.
Almon Smith,	S †	Monroe.
Algernon Sidney Smith,	S †	Louisville, Ky.
Byron Smith,	P	Madison.
Henry D. Smith,	C	Verona.
William E. Spencer,	C	Madison.
John C. Spooner,	P	"
Fred. T. Starkweather,	C	Milwaukee.
Addison A. Sterling,	S †	Sterlingville, Penn.
Isaac S. Stewart,	S †	Waukesha.
James W. Stillman,	S †	Westerly, R. I.
Emory W. Stone,	S	
John E. Sutton,	C	Hanchettville.
J. Dwight Tredway,	P	Madison.

NAME.	COURSE.	RESIDENCE.
Edward A. Valentine,	S	
Henry Vilas,	C	Madison.
Levi M. Vilas,	P	"
Thomas J. Vimont,	S †	Millersburgh, Ky.
George W. Vroman,	S	Fitchburg.
Samuel H. Watson,	P	Fulton, Rock Co.
Edward M. White,	C	Madison.
Cornelius E. Williams,	S	Sweet Home.
Henry B. Williams,	P	Janesville.
Henry C. Williamson,	S	Bedford, N. Y.
Martin H. Wilson,	S	Menomonie.
Edwin E. Woodman,	S †	Monroe.
Benj. F. Wright,	S	
John M. Zook,	P	

COMMERCIAL CLASS.

NAME.	RESIDENCE.	
Benj. D. Atwell,	Madison,	Wisconsin,
Geo. W. Allen.	Trempeleau,	Wisconsin,
H. A. Bradford,	Taunton,	Massachusetts.
E. P. Brooks,	Madison,	Wisconsin.
Wilmot Booth,	Madison,	Wisconsin.
Wm. A. Booth,	Madison,	Wisconsin.
M. L. E. Brooks,	Madison,	Wisconsin.
D. H. Brooks,	Madison,	Wisconsin.
F. B. Bryant,	Madison,	Wisconsin.
Robert Ball,	Madison,	Wisconsin.
[illegible] K. Brown,	Fond du Lac,	Wisconsin.
J. S. Babcock,	Columbus,	Wisconsin.
F. Q. Ball,	Monroe,	Wisconsin.
Wm. H. Bradbury,	Madison,	Wisconsin.
Warren Cole,	Madison,	Wisconsin.
Harvey Conley,	Madison,	Wisconsin.
S. P, Clark,	Montrose,	Wisconsin.
T. V. Cashen,	Madison,	Wisconsin.
Peter Clark,	Madison,	Wisconsin.
J. S. Comfort,	Mineral Point,	Wisconsin.
L. M. Comins,	Madison,	Wisconsin.
H. D. Cox,	Milford,	Wisconsin.
C. L. Campbell,	Madison,	Wisconsin.
John A. Dearborn,	Madison,	Wisconsin.
Jas. N. DeWolf,	Madison,	Wisconsin.
Frank M. Dorn,	Madison,	Wisconsin.
J. M. Eskew,	Madison,	Wisconsin.
Geo. B. Edwards,	Madison,	Wisconsin.

NAME.	RESIDENCE.	
S. H. Fernandez,	Madison,	Wisconsin.
Jac. Fleischer,	Madison,	Wisconsin.
Knud J. Fleischer,	Madison,	Wisconsin.
P. W. French,	Madison,	Wisconsin.
Wm. F. Fitch,	Madison,	Wisconsin.
E. B. Guild,	Madison,	Wisconsin.
Loring Guild,	Madison,	Wisconsin.
Almerin Gillett,	Springfield,	Wisconsin.
Arthur Gleason,	Madison,	Wisconsin.
Geo. P. Hopson,	Le Claire,	Iowa.
Jas. Hogan,	Madison,	Wisconsin.
O. L. Hart,	Hustisford,	Wisconsin.
Geo. O. Hill,	Waterloo,	Wisconsin.
Neil Howie,	Madison,	Wisconsin.
E. E. Hale,	Madison,	Wisconsin.
J. Mason Haight.	Madison,	Wisconsin.
Paul Halverson,	Cottage Grove,	Wisconsin.
J. W. Heathcock,	Lindon,	Wisconsin.
H. B. Jobes,	Albany,	Wisconsin.
J. A. Jackson,	Madison,	Wisconsin.
Peter Kavanaugh,	Madison,	Wisconsin.
Jas. Kavanaugh,	Madison,	Wisconsin.
Gotfred Krebs,	Madison,	Wisconsin.
A. J. Krum,	Madison,	Wisconsin.
Chas. H. Kellogg,	Madison,	Wisconsin.
Edward Larkin,	Madison,	Wisconsin.
J. J. Myers,	Madison,	Wisconsin.
A. Menges,	Madison,	Wisconsin.
Frank Munger,	Madison,	Wisconsin.
J. G. Membard,	Madison,	Wisconsin.
W. P. McConnell,	Madison,	Wisconsin.
Jas. H. McDowell,	Madison,	Wisconsin.
E. S. Oakley.	Madison,	Wisconsin.
L. J. Patch,	St. Peter,	Minnesota.
Jas. S. Paine,	Madison,	Wisconsin.
Geo. K. Powers,	Madison,	Wisconsin.
Wm. P. Powers,	Madison,	Wisconsin.
Warham Parks,	Madison,	Wisconsin.
John Reynolds,	Madison,	Wisconsin.
J. F. Randolph,	Madison,	Wisconsin.

NAME.	RESIDENCE.	
Otis Remick,	Madison,	Wisconsin.
Edward Sumner,	Madison,	Wisconsin.
John E. Sutton,	Hanchetville,	Wisconsin.
Hallee Steenland,	Madison,	Wisconsin.
Frank Smith,	Madison,	Wisconsin.
D. K. Slavan,	Madison,	Wisconsin.
A. M. Squires,	Palmyra,	Wisconsin.
J. M. Sumner,	Madison,	Wisconsin.
J. W. Staples,	Madison,	Wisconsin.
W. Spangler,	Madison,	Wisconsin.
E. W. Stone,	Fort Atkinson,	Wisconsin.
Wm. F. Vilas,	Madison,	Wisconsin.
E. A. Valentine,	Ripon,	Wisconsin.
Horace Warner,	Sun Prairie,	Wisconsin.

SUMMARY.

Classical,	34
Scientific,	81
Preparatory,	44
Commercial,	84
Total,	243

CIRCULAR.

SUBJECTS OF INSTRUCTION

IN THE

DEPARTMENT OF SCIENCE, LITERATURE, AND THE ARTS.

CLASSICAL COURSE.

First Year.

First Term.—Algebra—Davies University.
Solid Geometry—Loomis'.
Livy—Lincoln's.
Xenophon's Memorabilia—Robins.
History of United States.

Second Term.—Plane Trigonometry—Loomis'.
Mensuration, Surveying, Navigation.
Horace—Odes.
Homer—Iliad—Owen's.
English Language.

Second Year.

First Term.—Analytical Geometry—Smith's.
Horace—Satires.
Homer—Iliad—Owen's.
French—Fasquelle's French Course.
" Colloquial Reader.
" Fasquelle's Napoleon.

Second Term.—Differential Calculus—Smith's.
Integral Calculus— "
Tacitus—History.
Æschylus—Prometheus.
French—Piciola Translations into French.
Collet's Dramatic Reader.

THIRD YEAR.

First Term.—Mechanical Philosophy—Peck's.
General Physics—Lectures.
Tacitus—Germania and Agicola.
Demosthenes—De Corona.
Rhetoric.
English Literature.
Mental Philosophy.

Second Term.—Spherical Trigonometry—Loomis'.
Astronomy—Robinson's and Loomis'.
General Physics—Lectures.
Juvenal.
Plato—Gorgias.
Mental Philosophy.
Logic.

FOURTH YEAR.

First Term.—Chemical Philosophy.
Inorganic Chemistry.
Ethics.
International Law.
Civil Polity.
History of Philosophy.
Christian Evidences.

Second Term.—Organic Chemistry.
Geology.
Botany.
Constitutional Law.
Political Economy.
History of Civilization.
Physiology of Public Hygiene.

SCIENTIFIC COURSE.

A course of study, under the above designation, equivalent to the classical course, occupying four years, has been established by an ordinance of the Board of Regents for the benefit of such students as desire to substitute advanced scientific studies for the Latin and Greek languages. It includes all the studies of the classical course, except the ancient languages; and in addition, the German language, and the Applications of Science to Agriculture, Architecture, Mining, Surveying Engineering, Public Health, &c.

This Course will be fully set forth in the next catalogue.

The following table exhibits the subjects of study in this course for the year, arranged by terms:

FIRST TERM.	SECOND TERM.
Algebra.	Plane Trigonometry and Applications.
Solid and Spherical Geometry.	Differential and Integral Calculus.
Analytical Geometry.	Spherical Trig. and Astronomy.
Mechanical Philosophy.	Natural Philosophy.
Natural Philosophy.	Organic Chemistry.
Inorganic Chemistry.	Geology, Botany.
History.	Constitutional Law.
Rhetoric.	Political Economy.
English Literature.	History of Civilization.
History of Philosophy.	English Language.
Christian Evidences.	Mental Philosophy.
Ethics.	Logic.
International Law.	Physiology, Public Hygiene, &c.
Civil Polity.	Practical Surveying, Engineering, Drafting, &c.
Practical Surveying, Engineering, Drafting, &c.,	Speaking and Composition.
Speaking and Composition.	French Language.
French Language.	German Language.
German Language.	

The subjects of study belonging to the Department of Science, Literature and the Arts, are discussed under the following heads; each one of which is placed under the charge of a Professor, with such assistance as may be necessary, who is responsible for the progress and attainments of the students therein:

ETHICAL AND POLITICAL SCIENCE.

[Chair vacant.]

The instructions of this chair are rendered in course, to subgraduates of the fourth year, and to such other students of the University as elect to attend. The subjects of instruction are eminently adapted to prepare the student to become a good and useful citizen of the republic, and to fit him for civil service in the same. The course occupies a year, one exercise each day, and is as follows:

Ethics,—Moral Obligation; Development of Moral Law; Sanctions of Moral Law; Practical applications of the Science.

The text-book, Wayland's Elements of Moral Science, is used, merely as suggesting a convenient series of topics for oral lecture, and for familiar discussion in class.

Civil Polity,—Political Ethics; Science of Government; The American Constitution; International Law; History of Civilization.

This class of subjects is taught wholly by lecture, with intermediate examination and discussion. The student is required to write out his views on each topic, and at stated periods, to read his results before the class.

Political Economy,—Production of Material Wealth; Distribution; Exchange and Consumption; Applications of the Science; Relations to Civilization.

The discussion of this subject in class, is in the order of topics suggested by Say in his Treatise on the Production, Distribution, and Consumption of Wealth.

MENTAL PHILOSOPHY, LOGIC, RHETORIC, AND ENGLISH LITERATURE.

Daniel Read, LL. D., *Professor*

The instructions of this chair are rendered to subgraduates of the first, third and fourth years. An *extra* course on English Literature will be given annually to students not of the regular classes.

The course of instruction in *Intellectual Philosophy* embraces an analysis of the powers of the human mind, *active* and *moral*, as well as those denominated *intellectual*, the examination of those powers in reference to criticism, to teaching, to the improvement of the individual and the progress of society. It includes also, a critical review of the systems of philosophy, which have prevailed among men.

Logic is taught as to its principles and application; an outline of the laws of evidence and human belief is given; and in connection with this part of the subject, the evidences of Christianity are examined.

Rhetoric, so far as it relates to the subjects of *invention* and *disposition*, is taught by lectures, upon the basis of Quintillian and Cicero; and, as regards *style* and *criticism*, upon that of modern writers.

In the course of English Literature are included the history of the English language, an examination of its elements, powers and grammar, and the history of English Literature in its various departments.

In *history* Webber's outlines will be used as a text-book, and a course of lectures will be given on the civil history of the United States.

The course in this department for the term beginning February 8th, will be the following:

I. Mental Philosophy,—Embracing analysis of the faculties of the human mind, *active* and *moral*, as well as those denominated *intellectual*; examination of these powers in reference to criticism, to teaching, to the improvement of the individual and the progress of society.

The course also embraces a critical review of the systems of Philosophy which have prevailed among men.

The instruction of the department is conducted by means of text-books (Haven) and lectures. The student is required to give orally or upon the blackboard, an analysis of every subject, as well as to prepare carefully written abstracts and dissertations upon assigned topics. Hour from 10—11 A. M.

II. Class in English,—History of English Language; its composition, grammar, structure of sentences, punctuation. History of the progress of English Literature in its various departments. Hour 11—12 A. M.

III. Speaking and Composition,—All students required to engage in these exercises. 3 P. M.

MATHEMATICS AND NATURAL PHILOSOPHY.

J. W. Sterling, A. M., *Professor.*

COURSE OF STUDY.

FIRST YEAR.

Terms.
1. Algebra—Davies (University Ed.) Solid and Spherical Geometry—Loomis.
2. Plane Trigonometry—Loomis; Mensuration, Surveying and Navigation—Loomis.

SECOND YEAR.

Terms. 1. Analytical Geometry—Smith's.
2. Deferential and Integral Calculus—Smith's.

THIRD YEAR.

Terms. 1. Mechanical Philosophy—Peck's; General Physics (Lectures.)
2. Spherical Trigonometry—Loomis; Astronomy—Robinson's & Loomis'; General Physics, (Lectures.)

For admission to this course, candidates will, in future, be required to have a thorough knowledge of Arithmetic, Mental and Written; the Elements of Algebra, (Ray's) and Plane Geometry, (Loomis'.)

In this department there is one exercise daily for three years.

To secure thoroughness there will be frequent reviews, and written examinations on the subjects passed over.

On the various subjects of General Physics or Natural Philosophy, there will be weekly, extending throughout the year, at least two lectures accompanied by experimental illustrations. All who choose are permitted to attend these exercises. Each regular member of the class is expected to take notes of the lectures, and is frequently required to lecture on subjects previously discussed by the professor, repeating the experiments. This exercise is deemed important to cultivate in the student the habit of investigation and facility in communicating his knowledge.

Books of Reference in Natural Philosophy—Loomis, Lardner, Silliman, Olmstead, Arnott, Muller, Library of Useful Knowledge, Brewster (Optics), Herschell (Light and Sound), Jackson, (Optics.)

SURVEYING AND CIVIL ENGINEERING.

T. D. Coryell, A. M. *Instructor.*

This School was established by an ordinance of the Board of Regents, passed at their meeting in July, 1858. The subjects of Practical Surveying and Engineering were placed under the immediate charge of an Instructor. Since the passage of the ordinance, two terms' instruction has been rendered in this school. The proportion of students in attendance upon the course has been large, thus demonstrating that the school meets a recognized and well defined want.

In a new country like that from which the University draws the mass of its students, an increasing demand for the services of the Surveyor and Engineer may be expected, notwithstanding fluctuations in this demand, as in that for all other kinds of labor, occasioned by seasons of temporary financial embarrassment. The boundaries of landed estates are to be determined, villages and cities are to be laid out and supplied with water, shafts are to be sunk into the earth for ores, harbors and landings are to be improved, streams are to be dammed and bridged, marshes to be drained, warehouses, manufactories and public edifices to be erected, and roads and railroads are to be located, built and kept in repair. In the application of scientific principles required in the solution of these problems, lies the province of the Surveyor and Engineer. The continual widening of the domain of the natural sciences, and the rapidly accelerated increase of material wealth must make his work more and more indispensible, and give to the profession greater distinctness, permanence and importance.

Without attempting to cover the whole ground in every department of Surveying and Engineering, it is the object of the University Engineering School to impart to the student the best professional knowledge, and the greatest amount of it possible, in the time allotted him. The facilities which it affords are not intended to confer upon him that readiness of skill gained in actual practice—a thing which it is not necessary any school should do—but a sufficient number of practical exercises are required to familiarize the principles taught.

The course of instruction in this department extends over a period of two years, beginning with the first term of the year.

Candidates for admission to this course are required to have a knowledge of Algebra and Synthetic Geometry, for acquiring which ample facilities are given in connection with the chair of Mathematics.

The instruction is rendered by the use of text-books and by lectures, accompanied by frequent and thorough reviews and examinations.

Special attention is given to the theory and use of the most approved forms of the Surveyor's Compass, the Level and the Transit.

Portions of the class are detailed in turn for field exercises, when the weather is fair, and at the more favorable seasons of the year, excursions are taken into the country for the purpose of familiarizing the student still further with the best methods of executing actual surveys.

The General Principles of Construction, and their applications to particular works, are made subjects of study, and are explained and illustrated by reference to existing structures.

The materials and the machinery employed under the direction of the Engineer, are also treated of.

Drafting is required throughout the entire course.

The subject of study for the term commencing on the 9th of February, 1860, embrace Surveys of U. S. Public Lands, and the method of Executing and Recording County Surveys, including the sub-division of the Section, (taught by lecture, Gillespie's, Davies and Robinson's Surveying used as books of reference.)

Leveling, (Lectures.)

The Location of Tangents and Curves in Railroad Surveying, Side Staking, &c., (Hencke's Field Book used as a text-book.)

Drafting, (Mayhan's Industrial Drawing.)

CHEMISTRY, NATURAL HISTORY AND THEIR APPLICATIONS.

Ezra S. Carr, A. M., M. D., *Professor.*

The instruction in this department is given by lectures and demonstrations on the part of the professor and students, together with examinations.

The recitation of the student consists in his giving a lecture, illustrated with experiments and demonstrations on the same subject and after the manner of the Professor, thus not only necessarily acquiring an intimate knowledge of the subject discussed, but at the same time the faculty of communicating his knowledge.

The subjects discussed embrace a full illustration of all the topics of theoretical or practical importance, and their applications to the useful arts, the processes of common life, Agriculture, Philosophy, &c.

FIRST TERM.

Chemical Philosophy, Chemistry of the Non-Metalic Elements, Fuel, Heating, Lighting, Ventilation, &c.

SECOND TERM.

Chemistry of the Metals and Metaullurgy, Organic Chemistry, including the Chemistry of Animal and Vegetable Life; the Preparation, Preservation, Uses of food, &c.

Botany.—The Plant being first considered as an individual in reference to the nature and processes of vegetable life; Second, its relation to other plants, or the Vegetable Kingdom; Third, its uses.

Geology.—Considered especially in relation to the uses of rocks, and their relations to useful minerals.

TEXT BOOKS.

Chemistry.—Silliman, Regnault, Gmelin, Johnston's Chemistry of Common Life, Tounsand's Hand Book of Household Science, Knapp's Technology.

Botany.—Wood, Grey's Works, Lindley's Vegetable Kingdom.

Geology.—Hitchcock's, Lyell, Delabeche, Geological Reports of the different States.

PHYSIOLOGY AND HYGIENE.

D. B. Reid, M. D., F. R., S. S., *Professor*.

This department comprises an exposition of the Structure and Functions of the human Frame, and of the mutual relation of internal and external causes in promoting health, strength, and length of life.

The origin and prevention of disease, the varied temperament of individual men; the effect of climate, habit, occupation and recreation; the Hygienic Questions associated with the construction of public and private buildings, including all classes of habitations in cities, populous districts and isolated localities, as well as the sources of improvement and decay in different Nations and Races,—are included in considering the laws that regulate the preservation of Health.

The improvement of Architecture, more especially in connection with acoustry, drainage, heating, lighting, ventilating and fire proofing is a special object of attention.

The course is intended for all classes of students, particularly as a guide in making known the nature of the living frame, and in unfolding the most prevalent causes of preventible disease and death. It is also arranged with the view of affording instruction to those who may intend to study medicine, or to enter any service where they are expected to have a knowledge of sanitary improvement. Students of Agriculture, Architecture, Engineering, Arts and Manufacture; have their attention directed to the varied sources of efficient and economic Sanitary Improvement that are connected with these subjects.

ANCIENT LANGUAUES AND LITERATURE.

JAMES D. BUTLER, A. M., PROFESSOR.

COURSE OF STUDY.

FIRST YEAR.

Latin.

Terms. 1. Livy.
2. Horace—Odes.

Greek.

Terms. 1. Xenophon—Memorabrilia—Robbins' Edition.
2. Homer—Iliad—Owen's Edition.

SECOND YEAR.

Latin.

Terms. 1. Horace—Satires.
2. Tacitus—History.

Greek.

Terms. 1. Homer—Iliad.
2. Æschylus—Prometheus.

THIRD YEAR.

Latin.

Terms. 1. Tacitus—Germania and Agricola.
2. Juvenal.

Greek.

Terms. 1. Demosthenes de Corona.
2. Plato—Gorgias.

The grammars used, are Crosby for Greek, and Andrews' (Revised Ed.) for Latin. For all but the most advanced students, the new Latin Dictionary by Crooks and Schem is recommended as by far the best.

Classical Geography will be illustrated by Kiepert's mural maps, the whole series of which hangs in the class-room. The light always radiating from words upon things, as on religion, art, philosophy, nationality, and the whole manner of ancient life, will be daily traced. No pains will be spared to make the classical languages elucidate our own vernacular. Throughout the curriculum, the study will be an exercise, not of mere verbal memory, but of philosophical memory, of discrimination, of rendering reasons, and of research concerning things, no less than words.

The time needful for completing this course will vary with the diligence and previous attainments of students.

Among the reference books which it is desirable that philological students should have on their tables—in addition to the grammars, of Crosby for Greek, and Andrews for Latin, and the lexicons of Andrews for Latin, and Liddell and Scott for Greek, may be mentioned:

Rich's Companion to the Latin Dictionary and Greek Lexicon.

Smith's Dictionary of Greek and Roman Geography, Biography, Mythology and Antiquaries. 6 vols. 8vo.

Doederlein's, or Ramshorn's Latin Synonymes.

Finlay's Classical Atlas.

Becker's Gallus and Charicles.

MODERN LANGUAGES AND LITERATURE.

JOSEPH C. PICKARD, A. M., PROFESSOR.

The instructions of this Chair will embrace,

1st. The French and German Languages and their Literature.

2d. Comparative Philology and the principles of the Science of Language.

There are two classes in German, one for beginners, the other for more advanced students.

Extra instruction will be given, when desired, in Italian and Spanish, and in the English in its Anglo-Saxon forms.

FRENCH.

First Term.—Fasquelle's French Course.
" " Colloquial Reader.

Second Term.—Fasquelle's Course, continued.
" Napoleon.
Picciola.

Third Term.—Translations into French.
Collot's Dramatic French Reader.

GERMAN.

FIRST YEAR.

First Term.—Woodbury's Method, and Reader.
Second Term.— do Schiller's 30 Years War.
Third Term.—Translations into German; Adler's Handbook.

SECOND YEAR.

First Term.—Becker's Grammar; Adler's Handbook.
Second Term.— do do; Schiller's and Gœthe's dramas.
Third Term.—Gœthe's Faust; Writing German.

BOOK-KEEPING AND COMMERCIAL CALCULATIONS.

David H. Tullis, Instructor.

This School has for two years been in successful operation in the City of Madison under the denomination of "Bacon's Commercial College." It is now a part of the University, and will soon be transferred to the rooms designed for it in the main edifice. At present rooms are occupied in Bruen's Block. The course of study consists of,

1st. Single and Double Entry Book-Keeping, embracing the various departments of Trade and Mercantile accounts, viz: Wholesale and Retail, Stock and Partnership Books, Shipping, Steam Boating, Railroading, Banking, Manufacturing, Commission, Joint Stock and Company Business.

2d. Commercial calculations, comprising the system of calculations appertatning to Percentage, Equation of Payments, Compound Equations, Exchange, (Domestic and Foreign,) Arbitration of Exchange, General Average, Arbitration of Merchandise, Tonage of Vessels, Storage, and Custom House Transactions.

3d. Business Penmanship.

4th. Commercial Forms and Correspondence, including Forms of Invoices, Accounts current, Account Sales, Bills of Lading, Promissory Notes, Orders, Checks, Drafts, Bills of Exchange, Articles of Copartnership, and Business Letters.

5th. Lectures on Customs of Merchants, Rules of Trade, Commercial Law, Political Economy, &c., &c.

It is the purpose of the Board of Regents in the establishment of this Instructorship, to afford the student an ample opportunity to qualify himself for prosecuting the Mercantile Profession in any Department, and to any extent.

Students are taught separately, and not in classes, and can enter at any time they choose.

NORMAL DEPARTMENT.

Henry Barnard, LL. D., Chancellor and Professor of Normal Instruction.

Special instruction in the history and principals of education, and the classification, teaching and discipline of schools, will be given by the Chancellor. The arrangements for this department have not been fully made; but will be announced at an early day. In the meantime, special instruction will be given in a Normal Course commencing on the 10th of April, 1860, of which more particular notice will be given in a special circular.

PREPARATORY SCHOOL.

Arrangements have been made for this department, in connection with the City High School, of Madison, in charge of Prof. O. M. Conover, A. M.

The course of study for young pupils extends over three years, and is substantially as follows:

Year.	Term.	STUDIES.	STUDIES.	STUDIES.
First.	1.	Latin Grammer, Latin Reader.	Higher Arithmetic.	English Grammer.
	2.	Latin Grammar and Reader.	History.	English Grammar.
	3.	Latin Reader.	History.	English Composition.
Second.	1.	Cæsar's Commentaries.	History.	Greek Lessons, (Crosby's.)
	2.	Cæsar.	Elementary Algebra.	Greek Lessons.
	3.	Cicero.	Elementary Algebra.	Greek Lessons.
Third.	1.	Cicero.	Higher Algebra.	Anabasis, (Crosby's.)
	2.	Virgil.	Algebra.	Anabasis.
	3.	Virgil.	Geometry.	Anabasis.

UNIVERSITY SCHOOLS.

The foregoing chairs belong to the Department of Science, Literature, and the Arts, and are arranged by ordinance of the Board, into the following schools, namely:

SCHOOL OF PHILOSOPHY.

Henry Barnard, LL. D., *Chancellor*.

Daniel Read, LL. D.,
Professor of Mental Philosophy, Logic, Rhetoric, and English Literature.

* **J. H. Lathrop**, LL. D.,
Professor of Ethical Philosophy.

The subjects of study in this school are Mental Science, Logic, History, Æsthetics, and English Literature.

SCHOOL OF PHILOLOGY.

Henry Barnard, LL. D., *Chancellor*.

James D. Butler, A. M..
Professor of Ancient Languages and Literature.

Joseph C. Pickard, A. M.
Professor of Modern Languages and Literature.

Daniel Read, LL. D.
Professor of English Literature.

The subjects of study in this school are Ancient Languages and Literature—Modern Languages and Literature.

SCHOOL OF POLITY.

Henry Barnard, LL. D., *Chancellor*.

* **John H. Lathrop**, LL. D.
Professor of Ethical and Political Science.

Daniel Read, LL. D.,
Lecturer on International Law.

David H. Tullis,
Instructor in Commercial Science.

The subjects of instruction in this school are General Ethics, Political Ethics, Constitutional Law, International Law, Political Economy, and History of Civilization.

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* Resigned.

SCHOOL OF NATURAL SCIENCE.

HENRY BARNARD, LL. D., *Chancellor.*

EZRA S. CARR, M. D.,
Professor of Chemistry and Natural History.

DAVID BOSWELL REID, M. D., F. R. S. S.,
Professor of Physiology, Hygiene, &c.

JOHN W. STERLING, A. M.,
Professor of Natural Philosophy and Mathematics.

*** JOHN H. LATHROP, LL. D.,**
Professor of Ethical and Political Science.

DANIEL READ, LL. D.,
Professor of Mental Philosophy, Logic, Rhetoric and English Literature.

JOSEPH C. PICHARD, A. M.,
Professor of Modern Languages and Literature.

The subjects of study in the school of Natural Science are Chemistry and its applications, Natural History, General Physics, Mathematics, Physiology, and Hygiene, Ethics, Æsthetics, English Language and Literature, and Modern Languages and Literature.

SCHOOL OF CIVIL AND MECHANICAL ENGINEERING.

HENRY BARNARD, LL. D., *Chancellor.*

JOHN W. STERLING, A. M.,
Professor of Mathematics and Natural Philosophy.

T. D. CORYELL, A. M.,
Instructor in Surveying and Engineering.

EZRA S. CARR, M. D.,
Professor of Chemistry and Natural History.

DAVID BOSWELL REID, M. D., F. R. S. S.
Professor of Physiology and Hygiene, and Director of Museum of Practical Sciences.

DANIEL READ, LL. D.,
Professor of Mental Philosophy, Logic, Rhetoric and English Literature.

JAMES D. BUTLER, A. M.,
Professor of Ancient Languages and Literature.

JOSEPH C. PICKARD, A. M.,
Professor of Modern Languages and Literature.

The subjects of study in this School, are Mathematics, and Practical Engineering, Architecture and Drawing, Natural History, General Physics, Phisiology and Hygiene, English Language and Literature, Latin, or two of the Modern Languages.

Special attention is given to the theory and use of the most approved forms of the Surveyor's Compass, the Level, and the Transit. In fair weather, portions of each class are detailed in turn for field exercise, and excursions are taken into the country, to acquaint the student with the best methods of executing actual surveys. The apparatus thus far supplied is a full set of Surveyor's instruments, including one of the best of the Gurley's Transits.

The instruction is rendered by lecture and by use of text-books, accompanied by reviews and frequent examinations. It is a constant aim, to conduct all the exercises in a manner best suited to secure mental discipline.

The whole course extends over a period of two years, beginning with each fall term. Candidates for admission to this course are required to possess a knowledge of Algebra and Synthetical Geometry, for which ample facilities are afforded in connection with the Chair of Mathematics.

The subjects of study for the term beginning on the 8th of February, 1860, and extending over a term of twenty weeks, embrace:—

Surveys of the U. S. Public Lands, and the method of executing and recording County Surveys, including the Subdivision of the Section, taught by lecture, Gillespie's, Davie's and Robinson's Surveying, used as books of reference.

Leveling—taught by lecture.

The Location of Tangents, and Curves in Railroad Surveying, Side Staking, etc., Hencke's Field Book, used as a text-book.

Drafting—Mahan's Industrial Drawing, used as a text-book.

SCHOOL OF AGRICULTURE.

The Board of Regents, at their meeting in July, 1858, resolved to open this University School, as soon as the clear income of the University Fund, applicable to instruction, should reach $16,000 per annum; or sooner, if a full Professorship of Agricultural Science should be endowed from other sources. In the meantime, the application of Science to Agriculture and the useful Arts, will be taught in the School of Natural Science.

The subjects of study in this School are: Theory and Practice of Agriculture, Chemistry and its Applications, Natural History, General Physics, Physiology and Hygiene, Mathematics, English Language and Literature, Ethics and Political Economy, Rural Economy and Veterinary Art.

In the Department of the THEORY AND PRACTICE OF INSTRUCTION, there is one University School, to wit:

THE NORMAL SCHOOL

HENRY BARNARD, LL. D., *Chancellor*,
And Professor, of Normal Instruction.

DANIEL READ, LL. D.,
Professor of Mental Philosophy, Logic, Rhetoric and English Literature.

JOHN W. STERLING, A. M.,
Professor of Mathematics and Natural Philosophy.

EZRA S. CARR, M. D.,
Professor of Chemistry and Natural History.

DANIEL BOSWELL REID, M. D., F. R. S. S.,
Professor of Physiology and Hygiene, and Director of Museum of Practical Science.

* JOHN H. LATHROP, LL.D.,
Professor of Ethical and Political Science.

The subjects of study in this school are: Theory and Practice of Teaching, English Language and Literature, Mathematics, Physiology and Hygiene, Natural History, General Physics, Political Economy, Mental and Moral Science, and Aesthetics.

DEGREES.

The student who shall have completed the full Classical course, and passed satisfactorily the required examinations, will be entitled to the degree of *Bachelor of Arts.*

A successful prosecution of the same pursuits, for three additional years, will entitle him to the degree of *Master of Arts.*

The student who shall have completed the Scientific Course, and passed the required examination, will be entitled to the degree of *Bachelor of Philosophy.*

Three years successful prosecution of the same studies, will entitle him to the degree of *Master of Philosophy.*

Any student who has completed the course of study embraced in either of the foregoing schools, will be entitled to a diploma, certifying him to be a graduate of said school.

The studies of the Normal School will extend over a period of two years; and any student who shall, during this time, diligently and successfully prosecute the same, will be entitled to a *First Class English Certificate.*

If to these studies, be added the Ancient and Modern Languages, the student will be entitled to a diploma.

Students who shall have successfully pursued a select course of study, will be entitled to a Certificate.

TERMS OF ADMISSION.

Candidates for admission to the first year of the *Classical Course*, must pass a satisfactory examination in the Common English Branches, the Elements of Algebra, (Ray's), Plane Geometry, (Loomis'), Latin Reader, Cornelius Nepos, Virgil's Aenid, (6 books), Crosby's Greek Lessons, and the Anabasis of Xenophen.

Instead of these particular works in Latin and Greek, any fair equivalent will be accepted,

For admission to the first year of the *Scientific Course*, the requirement is the same as for the Classical Course, omitting the Ancient Languages.

Candidates for advanced standing are also examined in the studies to which the class they propose to enter, have attended.

Such as desire to pursue a partial course, will be admitted to any of the recitations for which they may be prepared.

Applicants for admission must present testimonials of good moral character, and students coming from other colleges, a certificate of honorable dismission.

It is provided in the by-laws, that no student shall be admitted by the Chancellor to residence in the buildings, or to the exercises of any term, till the charges for tuition, and room for study and lodging, shall have been paid, in advance.

ACCOMMODATIONS.

The University edifices contain public rooms for recitation, lecture, library, cabinet, etc., study and lodging rooms for students; apartments for the residence of some of the families of the Faculty: and a large dining hall for the board of the Faculty and Students. A laundry is also attached to the establishment. The buildings are warmed, during the winter, by furnaces, in the basement.

Furniture, for lodging and study rooms, must be furnished by the student.

RECITATIONS, ETC.

Each class attends three recitations or lectures, daily, There are also frequent exercises in declamation and composition.

EXAMINATIONS.

Each term is closed by a public examination of all the classes, at which every member of each class is required to be present. At the close of the second term the members of the regular classes will be examined in all the studies pursued during the year; and none will be allowed to advance whose examinations are not satisfactory.

These examinations will be both oral and written, and such as to furnish a thorough test of the students' acquirements.

LIBRARY, APPARATUS, ETC.

The library, which is open to of the University, comprises over three thousand volumes.

In the cabinet of minerals, there are over four thousand specimens, and the whole is of great scientific value. Full suits of specimens, collected in the geological survey of the State, are directed by law to be deposited in the University.

The Farwell collection of specimens in natural history, recently donated to the University, is in excellent condition, and is of high scientific and instructional value.

The philosophical and chemical apparatus is well selected for most purposes of scientific illustration.

LITERARY SOCIETIES.

The literary societies, the Hesperian and Athenæan, are valuable aids in the intellectual training of the student. Each has a library of several hundred volumes.

Spacious and commodious rooms have been provided in the new building for society halls, which will be ready for occupancy at the opening of the term in February next.

MERIT ROLL.

A permanent record is kept of the daily attendance, conduct, and recitations of each student; and information of his standing communicated from time to time, to his parent or guardian.

RELIGIOUS EXERCISES.

The students are assembled at prayers daily, in the chapel of the University, fifteen minutes before the morning hour for commencing study and recitation.

There is also a religious lecture every Sabbath afternoon in the chapel.

TERMS, VACATIONS, &c.

Commencement anniversary will hereafter be on the last Wednesday of June. And there will be but two terms in the collegiate year.

The *first term* will open six weeks from commencement, and continue nineteen weeks.

At the close of the first term there will be a *winter vacation* of *seven* weeks.

The *second term* will commence at the close of the winter vacation, or seven weeks from the Wednesday next before Christmas, and will continue twenty weeks, or till commencement.

The *summer vacation* will commence the last Thursday of June, and continue six weeks.

EXPENSES.

Tuition per term	$6 00
Room " "	5 00
Fuel " "	5 00
Library, repairs, &c., per term	2 00

The above items comprise all University charges—except for damages actually done by students—and must in all cases be paid *in advance*.

The charge for a full course in the commercial college, time unlimited, is	$25 00

Board in the University with families of the Professors can be obtained for $2 per week, payable in advance. Board in clubs is from $1 to $1.50 per week. Washing is from 40 to 60 cents per dozen.

ROOMS, &c.

Rooms in the University, under certain restrictions and conditions, can be secured by early application to the locating officer.

No student will be allowed to occupy a room until his bills for the term are settled.

Students in the regular University classes, in previous occupancy, will be allowed to retain their rooms, if on the ground at the opening of the term.

Students from abroad, admitted to the University classes, and intending to complete the collegiate or scientific course, will be permitted first to draw by lot for vacant rooms.

Rooms are furnished at the expense of the students, who should bring their own bedding, towels, &c.; other furniture can be obtained here second-hand or new, at moderate prices.

Students, not accommodated in the University, and not residing with their parents in Madison, will lodge and board in town, under such regulations as the Faculty may prescribe.

Young pupils not prepared to enter either of the regular University courses, will board in private families, and parents and guardians are particularly requested to make suitable arrangements in this regard, as no supervision on the part of the Faculty can form an adequate substitute for the regular habits of the Faculty.

ABSENCE.

The importance of punctual and continued attendance of students, from the beginning to the end of each term, cannot be too highly estimated.—The loss of a single day bears unfavorably on the character and the progress of the scholar. The distribution of vacations, and their aggregate length, leave no justification for the encroachment upon term time by further unnecessary absence. It is to be hoped that parents and guardians will concur with the Faculty in refusing leave of absence in ordinary cases.

CALENDAR FOR 1860 & 1861.

Second Term begins	Wednesday, Feb. 8th, 1860
Commencement Anniversary, at the close of Second Term, on	Wednesday, June 27th, 1860
First Term begins	Wednesday, Aug. 7th, 1860
Second Term closes	Wednesday, Dec. 8th, 1860
Second Term begins	Wednesday, Feb. 6th, 1861
Second Term closes with	Wednesday, June 29th, 1861
Commencement Anniversary begins	Wednesday, June 29th, 1861

Wisconsin State University.

FACULTY.

HENRY BARNARD, LL.D., Chancellor.

————————, Professor of Ethical and Political Science.

DANIEL READ, LL.D., Professor of Mental Science, Rhetoric, and English Literature,

JOHN W. STERLING, A.M., Professor of Mathematics and Natural Philosophy.

EZRA S. CARR, M.D., Professor of Chemistry and Natural History.

DAVID BOSWELL REID, M.D., F.R.S.E., Professor of Physiology and Hygiene, and Director of Museum of Practical Science.

JAMES D. BUTLER, A.M., Professor of Ancient Languages and Literature.

JOSEPH C. PICKARD, A.M., Professor of Modern Languages and Literature.

THOMAS D. CORYELL, M.A., Instructor in Surveying and Engineering.

DAVID H. TULLIS, Instructor in Commercial Calculations and Book-keeping.

O. M. CONOVER, A.M., Principal of Preparatory Department in Public High School.

COMMENCEMENT—Last Wednesday of June.

TERMS BEGIN;

1. Six weeks from Commencement—19 weeks.
2. Seven weeks from the Wednesday next before Christmas—20 weeks.

VACATIONS.

1. Seven weeks—commencing the Wednesday before Christmas.
2. Six weeks—commencing the last Wednesday of June.

EXPENSES.

Tuition for each Term,	$6 00
Room rent for each Term.	5 00
Fuel for each Term,	5 00
Library repairs, etc., for each Term,	2 00
Board per week with resident members of the Faculty, or in private families,	2 00
Board in Clubs,	1 25

Washing from 40cts. to 65cts. per dozen.

These charges are required strictly in advance. Rooms are provided with furniture at the expense of the students.

CLASSICAL AND SCIENTIFIC COURSE.

The CLASSICAL COURSE is substantially that of the best Colleges in the United States.

In the SCIENTIFIC COURSE advanced scientific studies take the place of the ancient languages.

TERMS OF ADMISSION.

Besides the common English branches, candidates for admission to the first year of the Classical Course will be examined in the Elements of Algebra, (Ray's,) Plane Geometry, (Loomis',) Latin Reader, Cornelius Nepos, Virgil's Æneid, (6 books,) Crosby's Greek Lessons, and the Anabasis of Xenophon. Equivalents will be received.

The requirement for admission to the Scientific Course is the same, omitting the ancient languages, as for the Classical Course.

Such as desire to pursue a select course will be admitted to any of the classes for which they are prepared.

PREPARATORY DEPARTMENT.

Provision for this department has been made in connection with the City High School of Madison. in charge of Prof. O. M. Conover, A.M., to whom application for information should be made.

COMMERCIAL DEPARTMENT.

Students are admitted at any time to this department, and may continue at pleasure. The charge is $25 for the course. Address D. H. TULLIS.

ENGINEERING DEPARTMENT.

The institution is now prepared to give thorough instruction in practical Surveying and Engineering. Address T. D. CORYELL.

Students in the Preparatory and Commercial departments are allowed to occupy rooms in the University buildings.

Communications addressed to Prof. J. W. STERLING, respecting board, rooms, and other particulars, will receive prompt attention.

HENRY BARNARD, Chancellor.

TEACHERS' INSTITUTES FOR 1860.

By directions of the Board of Regents of Normal Schools, the undersigned will appoint, in each county, at least one Institute, and arrange for a series of exercises, during the day, for the professional improvement of teachers, and of lectures and discussions in the evening for the advancement of education generally, for a series of not less than two days, and of not more than two weeks, on receiving (to him) reasonable assurance of attendance on the part of the teachers of the county, and of gratuitous board, and accommodations for the meetings, from the place applying for the appointment.

Arrangements will also be made, on application of school officers and teachers for a free lecture on education in a number of towns in the same county, during the session, or in the week preceeding or following the meeting of the Institute.

The undersigned proposes also to appoint a few Institutes for sessions of at least four weeks each, in connection with such literary institutions as will furnish class-room, part of the instruction, and the use of apparatus, at an expense to each teacher in prompt and regular attendance, for lodging, board, and instruction, not exceeding two dollars per week. One such Institute will be held at Madison, in connection with the State University, commencing on Wednesday morning, April 11th.

HENRY BARNARD,
Agent of Board of Regents of Normal Schools.

MADISON, *Feb.* 10, 1860.

THIRTEENTH ANNUAL REPORT

OF THE

BOARD OF REGENTS

OF THE

UNIVERSITY OF WISCONSIN,

FOR THE YEAR ENDING

SEPTEMBER 30th, 1860.

MADISON, WIS.:
E. A. CALKINS & CO., STATE PRINTERS.
1861.

DEC

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THIRTEENTH ANNUAL RPEPORT

OF THE BOARD OF REGENTS OF THE UNIVERSITY OF WISCONSIN, FOR THE YEAR ENDING SEPT. 30, 1860.

To the Legislature of the State of Wisconsin, the Regents of the University submit this their

THIRTEENTH ANNUAL REPORT.

The most marked event in the history of the University, during the past fiscal year, is the completion and partial occupation of the main edifice, to which has been given the name of UNIVERSITY HALL.

A marked increase in the number of students during the previous calendar year, led the Board, early in 1857, to entertain the belief that by the expiration of the time required for the construction of the main building, and the completion of its internal arrangements, the whole of the two dormitories then built would be required for their proper purpose; and that the increase of the University classes, together with the enlargement of the library and collections in Natural History, would require public rooms on a larger scale, and more convenient of access, than those for which temporary provision had been made. The Board were, moreover, led to believe, that there would be funds belonging to the University in the hands of the Commissioners of School and University Lands, sufficient, with such amounts as might be appropriated to the same purpose from the annual income, to erect and complete this building in two or three years. Under this belief, the Board obtained from the Legislature, in the winter of 1857, authority to borrow from the Commissioners a sum not exceeding forty thousand dollars, of the University fund. The main building was soon after put under contract, the summit of University Hill graded, the necessary excavation made, and the substructure and basement walls completed during the same year.

Meantime the expectations of the Board in regard to a loan from the University fund were disappointed, and in the Spring of 1858, the means required for the completion of the building could be raised only through the liberality of citizens of Madison, who advanced nearly ten thousand dollars, for which they received warrants upon the University treasury, in sums of one hundred dollars each, bearing ten per cent. interest, and payable eight months from date. Similar warrants were subsequently issued to the contractor and others, upon estimates and bills for work done

The amount of these construction warrants issued up to September 30th, 1858, was	$8,888 73	
From October 1st, 1858, to Sept. 30th, 1859,	15,600 00	
From October 1st, 1859, to Sept. 30th, 1860,	5,836 81	
Total amount issued to date,		$29,820 54
There have been paid and taken up of these to date,		12,311 00
Leaving then outstanding construction warrants amounting to		$17,509 54
Interest due on the same,		2,562 67
Total,		$19,071 28

It has been stated in a previous report, that by the original contract, the building was to have been erected for $36,550. This contract, however, did not cover the expense of grading University Hill, nor that of excavation, nor that of plastering and otherwise finishing the attic story. Changes and improvements have also been made in the details of the building during its progress, some of them of a highly important character; and these have largely increased its cost. The total cost of the building, from its inception to the date of this report, is shown by the following figures:

Cash warrants issued for expenditures in any way connected with University Hall, during the fiscal year ending Sept, 30th, 1857,	$1,292 15	
During fiscal year ending Sept. 30th, 1858,	16,091 81	
During fiscal year ending Sept. 30th, 1859,	8,195 79	
During fiscal year ending Sept. 30th, 1860,	4,854 54	
Total cash warrants,		$30,434 29
Ten per cent. warrants issued during the year ending Sept. 30th, 1858,	$8,383 73	
During the year ending Sept. 30th, 18[illegible],	15,680 00	
During the year ending Sept. 30th, 1860,	5,836 81	
Total ten per cent. warrants,		$29,820 54
Total cost to date,		$60,254 83

The items constituting this aggregate will be found in the reports of the Secretary of the Board, as printed in the appendix to our annual reports from year to year; those for the past year, in Appendix C. to this report.

To meet this expenditure, the Board had received in loans from the State funds, under authority of the acts of 1857 and 1858, to Sept. 30th, 1860, the sum of $28,407 00. There were outstanding at the same date construction warrants amounting to $17,509 54; and there had been paid toward the construction of the building, out of the annual income, $14,338 29.

From this statement it will be seen that the Board has conducted the erection of this building under circumstances of very considerable embarrassment and difficulty; that the resources of the University, for its proper educational work, have, in consequence, been greatly restricted for several years past, and that the same effect will continue to be felt for years to come. Could the Board have foreseen in the outset the protracted financial distress of the community, the consequent small amount of money which would be received into the University fund, and made available for building purposes, the difficulty of raising money upon any moderate rates from other sources, the general depression of the educational interest in the State, growing out of the same causes, and the other facts in the history of the institution which have tended to modify opinion in regard to the speedy necessity for this building, it would undoubtedly have hesitated long before undertaking such a structure. But the errors of the past, if errors have been committed, cannot now be retraced. Having struggled thus far successfully with the difficulties of the work, the Board feel that they have a right to congratulate the Legislature and the people upon the fact that the magnificent grounds, which, in fulfilment of a sacred trust, accepted from the general government, they have set apart for the uses of an institution of learning of the highest grade, have been crowned with a noble structure, ample in its proportions, pleasing and impressive in its outline, well adapted upon the whole to its uses, conspicuous from afar in every direction, to all who approach the capital of this commonwealth, and serving to remind alike the stranger and the citizen, that Wisconsin recognizes and accepts the truth, that the education of the people is the highest interest of the State. If there is room for a doubt, whether this result has not been somewhat prematurely realized, there is, at least, the satisfaction of knowing that it has been realized in an economical manner; that the structure is solidly and thoroughly built; that though like bly spare from its annual income, to the payment of these warrants.

But even if its whole debt could be so funded as to bear but seven per cent. interest, the Board is of the opinion that one of the most imperative duties which it now owes to the institution, is to restrict its annual expenditures within the narrowest limits consistent with the efficient performance of that educational work upon which it has already entered. The remainder of its income, after paying current interest, must be devoted to the extinction of the principal of its debt. No citizens of the State feel more deeply than do the members of this Board, how wide and varied must be the scope of instruction, and how extensive the means of experiment and illustration, in a University which shall undertake really to meet the higher educational wants of this people in coming years. But all the more firmly, on that very account, must the Board refuse materially to expand its educational force at the present. We must not sacrifice to immediate effect the greater interest of the future. We must not exhaust the annual income of the institution upon its current expenses, and by keeping it forever under a load of debt, restrict its available income in the future to its present narrow limits, and thus secure a continued and a growing disproportion between its available means and the ever increasing demands which that future will bring.

Impressed with these views, the Board, at its meeting in July last, adopted measures for retrenching the current expenses of the institution. The Faculty, as at present constituted, consists of a Chancellor, five Professors, and a Tutor. The aggregate of their salaries, payable from the University Fund Income, is $7,100. In addition, the professors divide among them equally, the fees paid by students. At the same meeting, the Board adopted the following ordinance, to wit:

"The sum of ten thousand dollars annually, is hereby appropriated, irrevocably, from the income derived from the permanent fund of the University, to pay, first, the current annual interest of the permanent debt of the University, as the same shall become due in each year; and, secondly, the balance of said sum of ten thousand dollars, so above annually appropriated, after paying said annual interest, shall be applied in each year to taking up, paying, and sinking such permanent debt according to law: first, taking up, paying, and sinking the ten per cent. outstanding University warrants; and, second, in taking up, paying, and sinking the eight per cent. indebtedness due by the University; and third, the debt due to the school fund of the State; and fourth, the principal of the University fund, borrowed by the University: and this ordinance shall take effect immediately."

Under this ordinance, the annual income and disbursements from the University treasury for some years to come may be estimated as follows;

Income of University fund,		$20,070 81
Salaries of Chancellor and Faculty,	$7,100 00	
Interest on indebtedness to various State Funds,	5,075 70	
Interest on loan from J. D. Ledyard,	400 00	
Amount appropriated to payment of principal and interest of construction warrants,	4,524 30	
Balance applicable to miscellaneous expenses,	2,970 81	
Total		$20,070 81

5. UNIVERSITY GROUNDS.

Under the direction of the Building Committee, the front gates opening into the grounds have been closed, and the straight roads leading from them to the buildings, seeded down. Winding roads from entrances upon the south side of the enclosure, present a more gradual acclivity, and will serve to increase rather than to mar, the natural beauty of the grounds. No changes, requiring a further removal of the natural growth of trees, will be needed, so far as now appears, until the board shall feel able to employ competent professional skill in preparing a plan for the tasteful and permanent improvement of the grounds.

6. INTERNAL CONDITION OF THE UNIVERSITY.

The Faculty of the institution, as at present organized, consists of the following officers;

Henry Barnard, LL. D.,
Chancellor and Professor of the Theory and Practice of Teaching.

John W. Sterling, A. M.,
Dean of the Faculty and Professor of Mathematics and Natural Philosophy.

Daniel Read, LL. D.,
Professor of Mental, Ethical, and Political Science, Rhetoric and English Literature.

Ezra S. Carr, M. D.,
Professor of Chemistry and Natural History.

James D. Butler, A. M.,
Professor of Ancient Languages and Literature.

John P. Fuchs, M. D.,
Professor of Modern Languages and Literature.

THOMAS D. CORYELL, M. A.,
Tutor.

DAVID H. TULLIS,
Instructor in Commercial Calculation and Book-Keeping.

A full statement of the several courses of study, and the modes and subjects of instruction by the different Professors, will be found in the circular prepared by the Faculty, and annexed to this report.

In the absence of the Chancellor, the executive duties usually assigned to that officer, so far as they pertain to the internal affairs of the University, have been discharged by Prof. John W. Sterling, who holds, by appointment of the Board, the office of Dean of the Faculty. These duties have been superadded to Prof. Sterling's proper professional labors, and have been discharged with energy, fidelity and success.

It appears from the catalogue appended to this report, that the whole number of students in attendance during the year ending on the 27th of June last, was 227. The whole number in the classical, scientific, and preparatory courses, was 137. The degree of Bachelor of Arts was conferred, at the last Commencement, upon seven young gentlemen; that of Bachelor of Science, upon one; that of Master of Arts, in course, upon three graduates of the year 1857.

The number of students in attendance upon the three courses above mentioned, during the year 1855, three terms, is reported at.........	92
From July, 1855, to Dec. 31st, 1856, four terms,..............................	169
For the year ending July 21st, 1857, three terms,............................	164
From July, 1857, to Dec., 1858, four terms,....................................	163
For the year ending Sept. 30th, 1859,...	159
" " " June 27th, 1860, two terms,..........................	187

The change from year to year in the method of preparing the catalogue, in respect to the length of time covered by it, renders it impossible to make an exact comparison between the several years. The average attendance whether for the week, month or term, has never been reported to the Board. The maximum of annual attendance thus far secured, seems, however, to have been attained in the scholastic year ending July 27th, 1857. The apparent falling off, observable during the past year, is probably due to several different causes. Among these may be mentioned: first, the general scarcity of money, and depression of the educational as well as of other interests; secondly, the fact that owing to a change in the terms and vacations, the last year covered a briefer period of instruction than usual, and only two, instead of three, terms; thirdly, the protracted absence from the State of the Chancellor of the University.

When the Board, two years since, secured for the position of Chancellor of the University, a gentleman distinguished for a quarter of a century as a leader in educational improvement in this country, they did so by an arrangement with the Board of Regents of Normal Schools, by virtue of which the newly elected Chancellor was also to act as the general agent for the latter Board. Under a belief that the detail of internal administration could be safely entrusted, for a period at least, to other hands, and actuated by an earnest desire, which they still retain, to make the University, in the most conspicuous and the most practical manner, a part of the general public school system of the State, the Board embraced what seemed to it a fortunate opportunity to repose the chief executive powers of the University in the same hands which were to guide the new movement for the elevation of our common schools. A severe illness prevented Chancellor Barnard from entering upon his duties for months after the period originally fixed upon for that purpose. When at length he was enabled to engage in those duties, it was with physical powers greatly shattered, and unfortunately inadequate to the immense labors demanded of them. It was expected that, in any event, his time and efforts would be mainly employed during the first year in the organization of those agencies, operating throughout the State, whose management devolved upon him as general agent of the Normal Board. In spite of continued ill health, occasionally assuming a form so threatening as to compel a hasty and entire abandonment, for a time, of his labors, and a retreat from them by absence from the State, the Board are happy to believe that the series of measures for the promotion of popular education, planned and executed during the last two years, of which measures Dr. Barnard was the general superintendent and the inspiring soul, have produced beneficial effects extending to almost every school district in Wisconsin. It was inevitable however that the University should suffer from the prolonged absences of its Chancellor, even when engaged in other portions of the State. Especially was this result inevitable when these absences occurred at the very commencement of a new administration, and during the introduction of changes in the Faculty, and in many of the internal arrangements of the institution, which however good they might be supposed to be in themselves, must necessarily provoke some prejudice and hostility, or at least distrust, in minds attached by habit to a different state of things. The evil assumed a graver character, when this officer, by stress of ill health, was compelled, from time to time, to retire from the State; and when at length a hard necessity has compelled his continued absence for a period extending from early in May last to the date of this report, it is not to be wondered at that a University still in its feeble and formative state, should feel severely the depressing influence.

Impressed by such considerations, Dr. Barnard proffered his resignation at a meeting of this Board held in June last; but in the hope then entertained that his health might still be restored, and that he might yet be enabled successfully to execute his plans for public education in Wisconsin, the Board, unwilling to act hastily upon so important a matter, declined to accept his resignation at that time, and have held the subject open for further consideration in the light of subsequent events. Should the hope of Dr. Barnard's restoration in sound health, and within a reasonable length of time, to his labors here, be disappointed, it will become the duty of the Board, during the next fiscal year, to make other provision for the discharge of the important duties pertaining to the Chancellorship of the University.

While it has resulted, from the causes above alluded to, that the attendance of students at the University has not increased during the past year, but rather diminished, it gives us pleasure to state that the spirit of insubordination, arising from these causes, which appeared at one period to have crept into the institution, has entirely disappeared; that the instruction and discipline are, in general, sound and healthy; that the young men engaged in the various classes have devoted themselves with earnestness to their studies; and that the results, as indicated by the annual examinations and commencement exercises of the past year, were such as to show that the University, as an institution for sound and liberal culture, is well worthy of the confidence of the community.

It is the practice of the Board to appoint annually a committee to attend the examinations of the several classes in the University at the close of the scholastic year, and make report thereon to this body. It is the aim of the Board to secure upon these committees both capacity and impartiality; and its desire that the committee shall comment with freedom upon everything in the internal state of the institution, especially as indicated by the examinations, that may seem to them worthy of remark. The committee for the last annual examinations consisted of the following gentlemen, to-wit: Messrs. John G. McMynn, J. L. Pickard, W. C. Whitford, John

Y. Smith, James W. [illegible] discharged their duty in a [illegible] not regard their appointment as a mere matter of form. We refer to their report (Appendix D.,) for further information touching the internal condition of the University.

7. LIBRARY APPARATUS AND CABINET.

The library of the University has been removed to its appropriate room in University Hall. It consists of only twenty-six hundred volumes. The Board has been able to appropriate only three hundred dollars annually for its increase, since July, 1859. About seventeen hundred dollars in all had been previously expended upon it. The present annual appropriation, small as it is, will, if judiciously expended, very greatly increase, in a few years, its practical value to students and professors. The appropriations for two years past will shortly be expended by the Librarian, Prof. Butler, under the general direction of the Faculty and the Library Committee of the Board.

The Mineralogical Cabinet still remains in the room fitted up for it in the South dormitory; and the principal portion of the Farwell Collection of Natural History is arranged in the same room. The collections of Wisconsin Geology and Natural History, which have been accumulating for some time past from the labors of the State Geological Commission, are deposited in a room in the north dormitory, entirely too small for their proper display. The whole number of specimens now deposited in this collection, is estimated by Prof. Carr, under whose charge they are placed, at

It is the intention of the Board that the earliest provision shall be made, consistent with a due regard to prudence in expenditure, for a full display of all these collections in the rooms appropriated to them in University Hall.

8. INVESTIGATION OF THE FINANCIAL HISTORY AND CONDITION OF THE UNIVERSITY.

At a meeting of the Board in July, 1858, a committee was appointed, consisting of Regents Hobart, Dewey and Davis, to investigate and report upon the financial history and condition of the University. By the assiduous labors of the Regent last named, an elaborate statistical report was made to the Board in July of the present year, an abstract of which will be found in Appendix E.

There is one fact disclosed in this report which deserves prominent mention. So judicious and so fortunate has been

APPENDIX "A."

REPORT OF THE TREASURER.

To the Board of Regents of the University of Wisconsin:

The Treasurer of the University, respectfully submits his annual report, containing a detailed statement of the receipts and disbursements of his office during the fiscal year, commencing on the 1st day of October, 1859, and closing on the 30th ultimo: from which it will appear that the receipts of the year, have amounted to the sum of $32,901 04, and the disbursements for the same time, to the sum of $32,060 12, leaving in the treasury, at this date, a balance of $840 92, to meet the salaries of Professors, and defray the current expenses of the University for the remainder of the year 1860.

N. W. DEAN, *Treasurer.*

Madison, Oct. 1st, 1860.

Report of Receipts and Disbursements by the Treasurer of the University, from the 1*st day of October, A. D.* 1859, *to the* 30*th day of September, A. D.* 1860, *inclusive.*

RECEIPTS.

Date.	From what Source.	Amount.	Total.
1859.			
Oct. 1,......	Balance of cash on hand as per last report, ...	$5,064 31	
Oct. 6,......	Professors Butler, Carr and Pickard—sales of boarding establishment,......	144 55	
Oct. 6,......	Peter L. Newman—sales of boarding establishment, ...	40 00	
Oct. 8,......	Received from income fund, ...	500 00	
Oct. 8,......	do building fund,............	1,500 00	
Oct. 19,......	do fees from University students, ...	590 50	
1860.			
Jan. 3,......	do income fund, ...	800 00	
Jan. 17,......	do building fund, ...	2,500 00	
Jan. 24,......	do income fund, ...	1,000 00	
Feb. 22,......	do .... do.....................	1,000 00	
Mar. 5,......	do .... do.....................	6,458 00	
Mar. 24,......	do .... do.....................	2,500 00	
Apr. 16,......	do .... do.....................	2,000 00	
Apr. 27,......	do building fund,............	3,400 00	
June17,......	do fees from students of University, ...	846 93	
June23,......	do income fund, ...	3,500 00	
June23,......	do building fund,............	1,000 00	
July 6,......	do Professors Carr and Pickard—wood	56 75	$32,901 04

DISBURSEMENTS.

Date.	No. of War't	To whom paid.	Amount.	Total.
1859.				
Oct. 1,......	902	E. S. Carr,..............................	$375 00	
Oct. 1,......	901	Henry Barnard, ...	437 50	
Oct. 1,......	900	Daniel Read,............................	375 00	
Oct. 1,......	899	J. W. Sterling,..........................	375 00	
Oct. 1,......	897	Jas. D. Butler,..........................	875 00	
Oct. 1,......	807	E. J. Brown,............................	— 90	
Oct. 1,......	—	J. H. Lathrop, ...	400 00	
Oct, 1,......	898	J. C. Pickard, ...	250 00	
Oct. 6,......	903	John N. Jones,..........................	4 21	
Oct. 7,......	904	D. B. Reid, ...	375 00	
Oct. 7,......	905	Wm. Flannegan, ...	78 00	
Oct. 10,......	906	Francomb & Gifford, ...	200 00	
Oct. 12,......	907	Governor's Guard Band, ...	25 00	
Oct. 18,......	908	Sylvester Hennescy, ...	9 00	
Oct. 19,......	909	Joseph Chatterson, ...	150 00	
Oct. 20,......	910	James Livsey, ...	240 00	
Oct. 22,......	911	James Campbell, ...	400 00	
Oct. 25,......	912	Sharpe & Oakley, ...	558 89	
Nov. 19,......	913	Carpenter & Hyer, ...	43 00	
1860.				
Jan. 3,......	914	James Campbell, ...	760 00	
Jan. 3,......	915	Joseph Chatterson, ...	58 00	
Jan. 3,......	916	J. D. Ruggles, ...	356 25	
Jan. 3,......	917	H. Barnard, ...	437 50	
Jan. 3,......	918	J. W. Sterling,.........................	875 00	
Jan. 3,......	919	E. S. Carr,.............................	375 00	
Jan. 3,......	920	J. D. Butler, ...	375 00	
Jan. 3,......	921	Daniel Read, ...	375 00	
Jan. 3,......	922	D. B. Reid,.............................	375 00	
Jan. 3,......	923	J. C. Pickard, ...	250 00	
Jan. 3,......	924	T. D. Coryell, ...	316 66	
Jan. 3,......	925	Wm. Flannegan, ...	78 00	
Jan. 3,......	926	James Herron,...........................	81 00	
Jan. 3,......	927	John Mausbach, ...	36 25	
Jan. 3,......	928	Peter L. Newman,........................	184 27	
Jan. 7,......	929	James Campbell, ...	288 39	
Jan. 10,......	930	Quinn & Matthews,.......................	217 00	
Jan. 10,......	931	Edmond Gibbs,...........................	94 91	
Jan. 15,......	932	E. G. Garner, ...	136 00	
Jan. 23,......	933	Bliss, Eberhard & Festner,......	38 75	
Jan. 25,......	934	James Campbell, ...	900 00	
Jan. 27,......	86	do	113 33	
Jan. 21,......	104	do	112 22	
Jan. 21,......	105	do	112 22	
Jan. 21,......	106	do	112 22	
Jan. 21,......	107	do	112 22	
Feb. 25,......	935	Nelson Dewey,...........................	15 00	
Feb. 24,......	936	H. C. Hobart, ...	20 00	
Feb. 24,......	937	John G. McMynn,.........................	17 50	
Feb. 29,......	938	Carl Schurz,............................	12 50	
Mar. 5,......	939	Goodrich & Johnson,.....................	50 00	

DISBURSEMENTS.—*Continued.*

Date.	No. of War't.	To whom paid.	Amount.	Total.
Mar. 7, ...	940	Church & Hawley, ...	228 70	
Mar. 7, ...	941	do	20 00	
Mar. 13, ...	942	Simeon Mills, ...	41 62	
Mar. 13, ...	943	N. W. Dean, Treasurer, ...	408 00	
Mar. 13, ...	944	do do	165 69	
Mar. 13, ...	945	George Bradbury, ...	30 00	
Mar. 13, ...	946	Mrs. A. A. Hough, ...	8 00	
Mar. 13, ...	947	C. L. Williams, ...	161 10	
Mar. 13, ...	948	Wakely & Tenney, ...	52 01	
Mar. 14, ...	949	Governor's Guard Band, ...	25 00	
Mar, 14, ...	951	Dexter & Nelligar, ...	20 56	
Mar. 19, ...	952	C. H. Luce, ...	144 72	
Mar, 12, ...	953	J. C. Hopkins, ...	282 00	
Mar. 13, ...	954	Atwood & Rublee, ...	120 50	
Mar. 13, ...	955	C. S. Mears & Co., ...	10 45	
Mar, 14, ...	956	Powers & Hoyt, ...	25 00	
Mar. 14, ...	958	R. B. Gibson, ...	3 50	
Mar. 12, ...	959	Hogan & Kelly, ...	19 00	
Mar. 31, ...	960	Matthew Boehmer, ...	9 50	
Mar. 31, ...	961	Sharpe & Oakley, ...	3 01	
Mar. 31, ...	962	J. H. Duparcq, ...	1 75	
Mar. 21, ...	963	Louis Raff'l, ...	23 85	
Mar. 21, ...	964	Madison Gas Co., ...	8 60	
Mar. 6, ...	965	S. R. Fox, ...	65 42	
Mar. 6, ...	966	A. G. Darwin, ...	21 00	
Mar. 24, ...	967	M. E. Fuller, ...	199 88	
Mar. 24, ...	968	James Livsey, ...	196 24	
Mar. 24, ...	969	Peter L. Newman, ...	93 39	
Mar. 24, ...	970	Wright & Paine, ...	84 45	
Mar. 24, ...	971	R. K. Findley, ...	33 35	
Mar. 29, ...	972	Dunning, Jones & Co., ...	27 89	
Mar. 29, ...	973	Atwood, Rublee & Reed, ...	41 10	
Mar. 28, ...	974	Muldoon & Crampton, ...	32 70	
Mar. 28, ...	975	Edmond Gibbs, ...	2 00	
Mar. 31, ...	976	New England Bakery, ...	22 87	
Mar. 31, ...	977	Chilcote & Zimmerman, ...	36 00	
Mar. 31, ...	978	Henry Barnard, ...	437 50	
Mar. 31, ...	979	John W. Sterling, ...	375 00	
Mar. 31	980	E. S. Carr, ...	375 00	
Mar. 31	981	J. D. Butler, ...	375 00	
Mar. 31	982	Daniel Read, ...	375 00	
Mar. 31	983	D. B. Reid, ...	375 00	
Mar. 31	984	J. C. Pickard, ...	250 00	
Mar. 31	985	J. D. Ruggles, ...	62 50	
Mar. 31	986	T. D. Coryell, ...	187 50	
Mar. 31	987	William Flannegan, ...	78 00	
Apr. 23	988	M. E. Fuller, ...	123 44	
Apr. 24	990	James Flannegan, ...	45 00	
Apr. 23	992	Quinn & Matthews, ...	100 00	
May 2, ...	993	S. Dean, Agent, ...	56 25	
May 2, ...	994	Wyman & Dean, Agents, ...	168 75	
May 21, ...	571	Charles Theias, ...	2 80	

DISBURSEMENTS—*Continued.*

Date.	No. of War't	To whom paid.	Amount.	Total.
May 26,......	995	Muldoon & Crampton,..............	25 00	
May 26,......	996	do	22 40	
May 1,......	216	Henry Barnard.	108 33	
May 1,......	217	do	108 33	
May 1,......	218	do	108 33	
May 1,......	219	do	108 33	
May 1,......	220	do	108 33	
May 1,......	221	do	108 33	
May 1,......	222	do	108 33	
May 1,......	223	do	108 33	
May 1,......	224	do	108 33	
May 1,......	225	do	108 33	
May 1,......	226	do	108 33	
May 1,......	227	do	108 33	
May 1,......	228	do	108 33	
May 1,......	229	do	108 33	
May 1,......	230	do	108 33	
May 1,......	231	do	108 33	
May 1,......	232	do	108 33	
May 1,......	233	do	108 33	
May 1,......	234	do	108 33	
May 1,......	235	do	108 33	
May 1,......	236	do	108 33	
May 1,......	237	do	108 33	
May 1,......	238	do	108 33	
May 1,......	239	do	108 33	
May 1,......	240	do	108 33	
May 1,......	241	do	108 33	
May 1,......	242	do	108 33	
May 1,......	243	do	108 33	
May 1,......	244	do	108 33	
May 1,......	245	do	108 33	
June 20,......	997	C. Abaly, ...	11 25	
June 20,......	998	Isaac A. Luce,..........................	36 00	
June 20,......	999	Frank Scheele,.........................	82 62	
June 22,......	1000	Charles Schulze,......................	7 50	
June 22,......	1001	Peter L. Neuman,......................	136 34	
June 25,......	1002	L. Powers,...............................	4 88	
June 25,......	1003	B. F. Perry,.............................	92 71	
June 27,......	1004	Carl Schurz, ...	15 00	
June 27,......	1005	B. E. Hutchinson,.....................	15 00	
June 27,......	1006	H. C. Hobart,...........................	20 00	
June 27,......	1007	Nelson Dewey, ...	12 50	
June 27,......	950	Cook & Belden,........................	3 25	
June 27,......	989	Crosby, Nichols & Co.,...............	15 00	
June 27,......	991	Nicholas Omans, ...	26 50	
June 27,......	1008	M. M. Davis,............................	75 00	
June 27,......	1009	do	18 00	
June 27,......	1010	J. H. Slaven, Treas. Board Ed....	500 00	
June 27,......	1011	M. E. Fuller,............................	81 75	
June 27......	1012	J. D. Butler, ...	875 00	
June 27......	1013	J. W. Sterling, ...	875 00	

DISBURSEMENTS.—*Continued.*

Date.	No. of War't	To whom paid.	Amount.	Total.
June 27......	1014	E. S. Carr, ...	375 00	
June 27......	1015	Daniel Read, ...	375 00	
June 27......	1016	J. C. Pickard, ...	250 00	
June 27......	1017	D. B. Reid, ...	375 00	
June 27......	1018	T. D. Coryell, ...	187 50	
June 27......	1019	J. D. Ruggles, ...	62 50	
June 27......	1020	R. B. Gibson, ...	3 50	
June 27......	1021	Peter Omans, ...	12 13	
June 27......	1022	A. E. Brooks, ...	54 00	
June 27......	1023	William Flannegan, ...	78 00	
June 27......	813	John N. Jones, ...	— 70	
June 27......	798	D. Appleton & Co., ...	4 50	
June 27......	138	James Campbell, ...	115 75	
June 27......	812	R. B. Gibson, ...	3 50	
July 12......	1025	M. M. Davis, ...	18 00	
July 12......	1026	Nelson Dewey, ...	15 00	
July 12......	1027	H. C. Hobart, ...	20 00	
July 12......	1028	John G. McMynn, ...	17 50	
July 12......	1029	Carl Schurz, ...	25 00	
July 12......	1030	N. W. Dean, ...	3 00	
July 18......	1032	E. G. Garner, ...	34 20	
July 18......	1035	E. A. Calkins, ...	5 00	
July 18......	1038	Jacob Lorch, ...	6 75	
July 18......	1039	T. Welch, ...	6 18	
July 18......	1040	Reinhert Bullem, ...	9 18	
July 20......	1041	Henry Barnard, ...	437 50	
July 23......	1042	N. W. Dean, Treasurer, ...	3,619 55	
July 28......	1043	do do	678 13	
July 26......	1044	Dr. D. B. Reid, ...	875 00	
July 26......	253	James Campbell, ...	105 83	
July 26......	288	do	105 83	
July 26......	1024	J. C. Pickard, ...	250 00	
July 26......	1031	Lovines Bassa, ...	27 18	
July 26......	1033	J. W. Sterling, ...	64 25	
July 26......	1034	Nicholas Omans, ...	15 56	
July 26......	1037	Sharpe & Oakley, ...	5 68	
Aug. 1......	1045	Peter L. Neuman, ...	112 50	
Sep. 18......	1046	S. H. Donnell, ...	46 20	
Sep. 20......	1047	Peter L. Neuman, ...	52 62	
Sep. 20......	1048	Natthew Neuman, ...	34 75	
Sep. 22......	1049	Lewis Raff'l, ...	37 75	
Sep. 22......	1050	Paul Berg, ...	20 00	
Sep. 24......	1051	Lewis H. Burdick, ...	18 90	
Sep. 30......	1052	E. S. Carr, ...	250 00	
Sep. 30......	1053	James D. Butler, ...	250 00	
Sep. 30......	1054	T. D. Coryell, ...	58 84	
Sep. 30......	1055	do	150 00	
Sep. 30......	1057	Daniel B. Read, ...	250 00	
Sep. 30......	1058	J. P. Fuchs, ...	200 00	
Sep. 30......	1059	William Flannegan, ...	75 00	
Sep. 29......	170	James Campbell, ...	115 83	
			$32,060 12	
Sept. 30,		Balance in Treasury, ...	840 92	$32,901 04

APPENDIX "B."

REPORT OF THE AUDITING COMMITTEE.

The undersigned, comprising the Auditing Committee of the Board of Regents of the University of Wisconsin, respectfully report that they met at the office of the Secretary of the Board, and compared the warrants issued by the Secretary, for the fiscal year ending Sept. 30th, 1860, with the books and vouchers therefor; and also the books and accounts of the Treasurer of said Board, with the warrants drawn on him by said Secretary, and certify to the Board of Regents aforesaid that we found the same to true and correct.

And we certify that the Treasurer aforesaid delivered to us warrants, paid by him during said fiscal year, amounting to the sum of $32,060,12, which were cancelled by us.

L. P. HARVEY,
Ch'n pro tem. of Executive Com.
J. D. RUGGLES,
Sec'y of the Board of Regents.

Madison, Oct. 1st, 1860.

APPENDIX "C."

SECRETARY'S REPORT.

Madison, October 1st, 1860.

To the Board of Regents of the University of Wisconsin:

The Secretary of the Board of Regents, respecfully reports, that during the fiscal year ending on the 30th day of September, ultimo, warrants have been drawn upon the Treasurer of the Board, as follows, to wit:

1859	To whom issued.	What for.	Amount.
Oct. 6,	John N. Jones.	Postage,	4 21
Oct. 7,	D. B. Reid,	Salary,	875 00
Oct. 7,	William Flanagan,	Services as Janitor,	78 00
Oct. 10,	Fracomb & Gifford,	Painting University Hall,	200 00
Oct. 12,	Governor's Guard Band,	Music at inauguration,	25 00
Oct. 18,	Sylvester Hennessey,	Labor on grounds,	9 00
Oct. 19,	Joseph Chatterson,	Superindent of "University Hall,"	150 00
Oct. 20,	James Livsey.	Building cisterns,	240 00
Oct. 22,	James Campbell,	Estimate on University Hall,"	400 09
Oct. 25,	Sharp & Oakley,	Plastering University Hall,	558 80
Nov. 19,	Carpenter & Hyer,	Printing and publishing,	48 00
Dec. 21,	James Campbell,	Estimate on University Hall,	760 00
Dec. 27,	Joseph Chatterson,	Superintendent of University Hall,	58 05
Dec. 31,	J. D. Ruggles,	Salary as Secretary, balance from Oct., '57	856 20
Dec. 31,	Henry Barnard,	Salary,	487 50
Dec. 31,	J. W. Sterling,	Same,	875 00
Dec. 31,	E. S. Carr,	Same,	375 00
Dec. 31,	J. D. Butler,	Same,	875 00
Dec. 31,	Daniel Read,	Same,	875 00

"C."—*Secretary's Report*—Continued.

1860.	To whom issued.	What for.	Amount.
Dec. 31,	D. B. Reid,	Salary,	375 00
Dec. 31,	J. C. Pickard,	Same,	250 00
Dec. 31,	T. D. Coryell,	Same,	316 66
Dec. 31,	William Flanagan,	Services as Janitor,	78 00
1860.			
Jan. 3,	James Herron,	Wood (in 1859)	81 00
Jan. 3,	John Mausbach,	Carpenter work and materials,	36 25
Jan. 3,	Peter L. Newman,	Same,	184 27
Jan. 7,	James Campbell,	Account of University Hall,	288 39
Jan. 10,	Quinn & Mathews,	Grading, (University Hall)	217 00
Jan 10,	Edmund Gibbs,	Water pipes, (University Hall)	94 01
Jan 15,	E. G. Garner,	Lightning rods, Un versity Hall)	136 00
Jan 21,	Bliss, Eberhard & Festner,	Binding for library and blank books,	38 75
Jan 24,	James Campbell,	Account of University Hall,	900 00
Feb 23,	Nelson Dewey,	Mileage and attendance as Regent,	15 00
Feb 23,	H. C. Hobart,	do do do	20 00
Feb 23,	John G. McMynn,	do do do	17 50
Feb 29,	Carl Schurz,	do do do	12 50
Mar 3,	Goodrich & Johnson,	Account of furnaces (University Hall)	50 00
Mar 5,	Church & Hawley,	Furniture for Literary Societies,	223 70
Mar 6,	Church & Hawley,	Repairing settees (University Hall)	20 00
Mar 6,	Simeon Mills,	Hardware,	41 62
Mar 6,	N. W. Dean, Treasurer,	Interest and exchange on loan from Ledyard,	408 00
Mar 6,	N. W. Dean, Treasurer,	Interest on loans to University,	166 69
Mar 6,	George Bradbury,	Drawings of Flues (University Hall)	30 00
Mar 6,	Mrs. A. A. Hough,	Engineeing instruments,	8 00

Mar 6,	C. L. Williams,	Balance of salary as Steward,	161 10
Mar 6,	Wakeley & Tenney,	Costs in suit vs. Regents,	52 01
Mar 6,	Governor's Guard Band,	Music at exhibition of literary societies,	25 00
Mar 6,	Cook & Belden,	Repairing clocks,	3 25
Mar 6,	Dexter & Nellegar,	Apparatus and chemicals (Laboratory,)	20 56
Mar 6,	C. H. Luce,	Lumber,	144 72
Mar 6,	J. C. Hopkins,	Wood,	282 00
Mar 6,	Atwood & Rublee,	Printing and publishing (1857 and '58,)	120 50
Mar 6,	C. S. Mears & Co.,	Lumber,	10 45
Mar 6,	Powers & Hoyt,	Advertising in "Farmer," (1859,)	25 00
Mar 6,	Silliman & Dana,	Silliman's Journal,	5 00
Mar 6,	R. B. Gibson,	Debates in Congress,	3 50
Mar 6,	Hogan & Kelley,	Digging Drain, (University Hall,)	19 00
Mar 6,	Mathew Boechmer,	Blacksmithing,	9 50
Mar 6,	Sharp & Oakley,	Lime and mortar for repairs,	8 01
Mar 6,	J. H. Deparcq,	Painting,	1 75
Mar 6,	Louis Raffell,	Mason work and materials,	23 85
Mar 6,	Madison Gas Co.,	Gas consumed at City Hall,	3 60
Mar 6,	S. R. Fox,	Hardware,	65 42
Mar 6,	A. G. Darwin,	Wood,	21 00
Mar 23,	M. E. Fuller,	Wood,	199 88
Mar 23,	James Livsey,	Labor and materials, (University Hall)	196 24
Mar 23,	P. L. Neuman,	Carpenter and Joiner Work,	98 39
Mar 23,	Wright & Paine,	Merchandize and chemicals,	84 45
Mar 23,	R. K. Findlay,	do do	33 35
Mar 23,	Dunning, Jones & Co.	do do (laboratory)	27 89
Mar 23,	Atwood, Rublee & Reed,	Printing and publishing, (1859-60,)	41 10
Mar 23,	Muldoon & Crampton,	Blacksmithing, (University Hall)	32 70
Mar 23,	Edmund Gibbs,	Iron tubing,	2 00
Mar 23,	New England Bakery,	Account of boarding department, (1859)	22 87
Mar 23,	Chilcote & Zimmerman,	Same, (1859)	36 00
Mar 31,	Henry Barnard,	Salary,	437 50
Mar 31,	J. W. Sterling,	Same,	375 00

"C."—*Secretary's Report*—Continued.

1860.	To whom issued.	What for.	Amount.
Mar 31,	E. S. Carr,	Same,	875 00
Mar 31,	J. D. Butler,	Same,	875 00
Mar 31,	Daniel Reed,	Same,	875 00
Mar 31,	D. B. Reid,	Same,	875 00
Mar 31,	J. C. Pickard,	Same,	250 00
Mar 31,	T. D. Coryell,	Same,	187 50
Mar 31,	J. D. Ruggles,	Same as Secretary,	62 50
Mar 31,	William Flanagan,	Services as Janitor,	78 00
Apr 17,	M. E. Fuller,	Wood and Merchandize,	128 44
Apr 17,	Crosby, Nichols & Co.,	North American Review,	15 00
Apr 17,	James Flanagan,	Labor about University Hall,	45 00
Apr 17,	Nicholas Omans,	do do do	26 50
Apr 20,	Quinn & Matthews	Grading, (University Hall)	100 00
May 2,	Simeon Dean, Agent,	Insurance premium,	56 25
May 2,	Wyman & Dean, Agents,	Same,	168 75
May 26,	Muldoon & Crampton,	Vane and pipes, (University Hall)	25 00
May 26,	Muldoon & Crampton	Repairs for boarding establishment,	22 40
June 20,	C. Abalay	Repairing Vane, (University Hall)	11 25
June 20,	Isaac A. Luce,	Roofing Observatory,	36 00
June 20,	Frank Scheele,	Labor on grounds,	32 62
June 22,	Chi. Scheele,	do do do	7 50
June 22,	P. L. Neuman,	Carpenter work and labor on grounds,	136 34
June 25,	L. Powers,	Grass seed,	4 38
June 25,	B. F. Perry,	Tin stock and labor, (University Hall)	92 71
June 27,	Carl Schurz,	Mileage and per diem as Regent,	15 00
June 27,	B. E. Hutchinson,	do do do	15 00
June 27,	H. C. Hobart,	do do do	20 00

June 27,	Nelson Dewey,	Mileage and per diem as Regent,	12 50
June 27,	M. M. Davis,	do do do	18 00
June 27,	M. M. Davis,	Per diem, committee of investigation,	75 00
June 27,	Treas. of Bd. Education of city of Madison.	Account of Preparatory Department of University,	500 00
June 27,	M. E. Fuller,	Wood and merchandize,	81 75
June 30,	J. D. Butler,	Salary,	875 00
June 30,	J. W. Sterling,	Same,	875 00
June 30,	E. S. Carr,	Same,	875 00
June 30,	Daniel Read,	Same,	875 00
June 30,	J. C. Pickard,	Same,	250 00
June 30,	D. B. Reid,	Same,	875 00
June 30,	T. D. Coryell,	Same,	187 50
June 30,	J. D. Ruggles,	Same, as Secretary,	62 50
June 30,	R. B. Gibson,	Debates in Congress,	8 50
June 30,	Peter Omans,	Labor on Laboratory,	12 13
June 30,	A. E. Brooks,	Wood,	54 00
June 30,	William Flanagan,	Service as Janitor,	78 00
July 12,	J. C. Pickard,	Salary to Oct. 1st,	250 00
July 12,	M. M. Davis,	Mileage and per diem as Regent,	18 00
July 12,	Nelson Dewey,	do do do	15 00
July 12,	H. C. Hobart,	do do do	20 00
July 12,	John G. McMynn,	do do do	17 50
July 12,	Carl Schurz,	do do do	25 00
July 14,	N. N. Dean, Treasurer,	Postage and express charges, &c.,	8 00
July 18,	L. Bossa,	Labor on grounds,	27 18
July 18,	E. G. Garner,	Lightning rod and repairs,	34 20
July 18,	J. W. Sterling,	Advances for commencement music and sundries,	64 25
July 18,	Nicholas Omans,	Labor on grounds,	15 56
July 18,	E. A. Calkins & Co.,	Newspapers,	5 00
July 18,	Wakeley & Tenney,	Drawing building contract,	5 00
July 18,	Sharpe & Oakley,	Mason work and materials,	5 63
July 18,	Jacob Lorch,	Labor on grounds,	6 75
July 18,	T. Welch,	Same	6 18

"C."—*Treasurer's Report*—Continued.

1860.	To whom issued.	What for.	
July 18,	Reinhard Bullen,	Labor on grounds,	9 18
July 20,	Henry Barnard,	Salary,	437 50
July 23,	N. W. Dean, Treasurer,	Interest paid on loans to University,	3,619 55
July 23,	N. W. Dean, Treasurer,	Interest paid on 10 per cent. construction warrants,	673 13
July 26,	D. B. Reid,	Salary to Oct. 1st,	375 00
Aug 1,	P. L. Neuman,	Superintendent of grounds and carpenter,	112 50
Sept 18,	S. H. Donnell,	Paints and oils,	46 20
Sept 20,	P. L. Neuman,	Labor on grounds,	52 62
Sept 20,	Mathew Newman,	Carpenter work, (University Hall)	34 75
Sept 22,	Louis Raffel,	Plastering North Dormitory,	37 75
Sept 22,	Paul Berg,	Painting seats, (University Hall)	20 00
Sept 24,	Louis H. Burdick,	Partitions in Dormitory,	18 00
Sept 30,	E. S. Carr,	Salary,	250 00
Sept 30,	J. D. Butler,	Same	250 00
Sept 30,	T. D. Coryell,	Balance salary of last year,	58 84
Sept 30,	T. D. Coryell,	Salary as Tutor,	150 00
Sept 30,	J. W. Sterling,	Salary,	250 00
Sept 30,	Daniel Read,	Same.	250 00
Sept 30,	J. P. Fuchs,	Same	200 00
Sept 30,	William Flanagan,	Services as Janitor,	75 00
Total,			$25,465 37

"C."—*Secretary's Report*—Contnued.

The foregoing schedule of warrants may properly be classified and charged to the following sources, to wit:

Salaries,	$11,768 25
Mileage and per diem of Regents,	241 00
University Hall,	4,854 54
Contingent expenses and repairs,	1,047 53
Wood,	789 88
Printing and publishing,	284 60
Postage,	7 21
Stationery,	20 00
Library,	50 75
Preparatory Department,	500 00
Laboratory,	61 24
Apparatus and engineering instruments,	34 56
Insurance,	225 00
Interest,	4,866 37
Investigation,	75 00
Labor on grounds, &c.,	395 56
Boarding establishment, (1859)	242 37
Litigation,	52 01
Total,	$25,465 87

Warrants as follows, payable eight months after date, and bearing interest at the rate of ten per cent. per annum, have been drawn during the past fiscal year upon the Treasurer of the Board, on the credit of the building fund, to aid in the erection and completion of the "University Hall" of the State University.

These warrants have been issued in pursuance of a resolution, adopted by the Board of Regents at their meeting in July, 1858:

1859.	To whom issued.	Numbers.	Amount.
Dec. 1,	Goodrich & Johnson,	Nos. 249 to 250 inclusive.	$200 00
Dec. 1,	James Campbell,	Nos. 251 to 255 "	500 00
Dec. 1,	do	No. 256	900 00
Dec. 1,	do	Nos. 257 to 291 "	3,500 00
Dec. 1,	Goodrich& Johnson,	No. 292	100 00
1860.			
Feb. 1,	James Campbell,	Nos. 295 to 296 "	200 00
Mar. 1,	do	Nos. 297 to 298 "	136 81
Mar. 19,	Joseph Chatterson,	Nos. 293 to 294 "	200 00
Apr. 20,	Quinn & Matthews,	No. 299	100 00
Total,			$5,836 81

“C.”—*Secretary's Report*—Concluded.

The financial books of the Secretary of State exhibit the condition of the University Fund, on the 30th of September ultimo, to be as follows:

Amount due on certificates of sale,	$229,273 98	
“ “ “ loans,	57,451 94	
Total productive fund,		$286,725 92
Balance in treasury,		1,919 33
Total,		$288,645 25

The amount above shown as the *productive fund*, is drawing interest at seven per cent. per annum. This interest constitutes the

UNIVERSITY FUND INCOME.

The income of this fund is annually applied towards defraying the current expenses of the University, and in reducing its indebtedness.

The amount above shown as drawing interest, is $286,725 92, the interest upon which, at seven per cent. per annum, amounts to	$20,070 81	
Add income in State Treasury, September 30th, 1860,	313 33	
Total,		$20,384 14

This sum will be subject to the drafts of the Treasurer of the University, during the current fiscal year, provided that the productive portion of the University Fund should be subject to no unfavorable fluctuation during such period.

There are some 17,500 acres of University Land now remaining subject to entry, which, if ultimately sold, will increase the fund about $52,000.

The report of the Treasurer will exhibit a detailed statement of the amounts received and disbursed by him during the last fiscal year, from which it will appear that there was a balance of $840,92 belonging to the University, on the 30th day of September, 1860.

Respectfully submitted,

J. D. RUGGLES, *Sec'y of Board of Regents.*

APPENDIX "D."

REPORT OF THE EXAMINING COMMITTEE.

To the Board of Regents of the University of Wisconsin:

The Committee appointed by the Executive Committee of your body "to attend the Annual Examination of University Classes for the year 1860," have attended to that duty, and respectfully beg leave to report:

The examinations were conducted mainly by the Professors, the Committee interposing questions as they thought proper, and may be classed as to method, under three different heads:

1. By short oral lectures on subjects previously assigned—each student having his own subject, and one or more days in which to prepare his lecture.
2. By written exercises, prepared during the examination hour, on subjects presented at the time.
3. By brief oral questions and answers, designed to elicit the kdowledge which the student had acquired on the subjects respecting which the questions were proposed.

The first method was developed in the examination on Chemistry, Geology, Botany, International Law and Rhetoric, and has some peculiar advantages, as it gives the student an opportunity in his room to collect, anolyze and condense the information which he possesses on the subject assigned him. When the same method is pursued in the recitation room, and the student is required to state succinctly what he knows in regard to the subject of study which he is pursuing, as your Committee are informed has been the practice under one, at least, of the Professors, it accustoms the student to hold his knowledge at his command, and enables him to express himself fluently in communicating that knowledge to others. The students who were exomined by this method, evinced a very thorough acquaintance with the subjects which they discussed, and your Committee have no doubt that they would, in most instances, have done themselves and their instructors equal credit, had they interchanged among themselves their topics of discussion. Your Committee approve of this mode of teaching for the studies in which it has been employed, and were much pleased with the result.

The second method was adopted in the examinations in Mechanics, Analytical Geometry, Philosophy, Calculus, the French, and one class in the German language. This mode gave the students an opportunity quietly to recall their information on the subjects before them, and carefully commit it to writing; at the same time they were obliged to depend on the stores of knowledge which they had accumulated in their minds, as they were not allowed to refer to text books or lexicons. Your Committee are happy to say, that, while the test thus applied to the students examined was rigid and precise, their mathematical demonstrations, and their translations in the French and German languages were generally correct, and evinced close application on the part of the students, and thorough drilling on the part of the teachers.

The third method was more or less employed in some branches of study by most of the Professors. The familiar questions and answers proposed and given, enabled your Committee to see readily the character of each student's mind, as well as the manner in which that mind had been drilled, and they developed an activity of mind, a clearness of perception, and an inquisitiveness of disposition in the students, indicative of past application to study, and foreshadowing future progress. The earnestness of the students was so outgushing, that sometimes even two or more of them were expressing their opinions at the same time that the professor was communicating his own views. And just here your Committee would suggest that, while they highly approve of earnestness and independence, net that a little more carefûl observance of the deferential properties of social intercourse, would render the manifest earnestness still more becoming and attractive.

Here a reference might be made to the appearance of the classes under the different Professors. It might be said that in Prof. Carr's department, the students seem to have acquired a good practical, as well as theoretical acquaintance with the subjects of study, so that they were able to perform chemical experiments with much skill and minute accuracy. The examinations were as usual highly interesting and very satisfactory.

The student's under Prof. Reed's instruction had been thoroughly drilled in definitions and in the outline and plan of the subjects of study, thus beginning at the foundation of things. If in any measure, there was an appearance of formality and special preparation in some of the studies for the examination, it was in the instance of the first method mentioned, where each student had been allowed some days in which to prepare the part assigned him. This was especially obvious in the examination of the Rhetoric class. The exclusion of this preparation would have exhibited the actual acquirements of the students to still better advantage. The students, however, under the third as well as under the first mode of examination, acquitted themselves satisfactorily. Your Committee would here suggest, that the students would better evince their drilling in the different classes, when examined by the first method, if the topics were not previously assigned them, except in cases where considerable preparation is needed in bringing forward the experiments illustrative of the subjects discussed.

In Dr. Reid's department, the students presented some excellent drawings prepared by themselves, of different structures, showing several modes of ventilation, and the arrangement of rooms for convenience and comfort. Their examination indicated a good acquance with the general principles of physiology, as applied to the useful arts.

Prof. Sterling had evidently succeeded in communicating to the students a good degree of interest in the difficult and abstruse but very improving studies of his department. There are, in all institutions of learning, minds which cannot or will not comprehend and love mathematical studies. Generally, however, and even more generally than has sometimes happened in Eastern Colleges, the students entered with interest into these investigations, and exhibited a familiar acquaintance with the principles of mathematics which could have been acquired only by very close and patient thought and application.

In Prof. Butler's department the students were carefully and critically examined in the pronunciation of words, and the syntax and etymology of the languages, as well their translation into English, and evinced by the general promptness and correctness of their answers, the thoroughness of their training.

In modern languages and in Latin, under Prof. Pickard's instruction, the students were examined, not only as to their acquaintance with the pronunciation and grammatical construction of the language, and their ability to translate into English, but, also, to their facility in rendering English into the French, German, and Latin languages. And, considering the time devoted to these languages, the progress of the students seems to be very marked and rapid. As the modern languages are somewhat extensively used in this State, it becomes a question whether more time and a higher place than is given to these languages, is not justly their due. The examinations in them were very full and gratifying.

The Students under the instruction of Tutor Coryell, were examined in Geomatry, Trigenometry, Surveying and Engineering, and seemed to have made excellent improvement of their time and means of instruction, and manifested much interest, as well as thorough drilling in their studies.

It would, perhaps, be proper for your committee to notice some deficiencies in the primary education of the students, which it may be the duty of higher Instructors to remedy as much as possible. In the written examinations, many words were mis-spelled, and the writing in some places was quite illegible. In the oral examination, indistinctness of articulation, and mispronunciation of English words, were noticed to a considerable extent.

In attending at the City Hall on Commencement day, your Committee were happy to witness, in the performers on the stage, a manliness of bearing, a breadth and compass of thought, and clearness and force in the expression of ideas not usually found in undergraduates. The exercises and doings of the day were altogether highly interesting and gratifying.

It is a matter of regret, on the part of the committee, that the Chancellor was prevented, by sickness, from participating in the exercises of the examination; and it is earnestly hoped that his health will be sufficiently restored, so that he can attend again to the supervision of the University.

Your committee would not close this communication without acknowledging their gratitude for the uniform kindness and courtesy shown to them by the Faculty and Students.

On the whole, your Committee think that the State has good cause to be proud of her University, and of her sons who enjoy its privileges. Let her cherish it. Let her Legislature, the Regents, the Professors, the Students, and the community, all act harmoniously in the performance of its interests, and it will prove to her a mine of wealth, richer and nobler than even the fertile and exhaustless soil of her prairies.

W. C. WHITFORD,
JAMES W. WARD,
J. Y. SMITH,
Com. of Examination.

Madison, Wis., June 26, 1860.

APPENDIX "E."

REPORT OF THE INVESTIGATING COMMITTEE.

The committee, appointed one year since, to investigate all the financial affairs of the University, from its first organization, would respectfully report that the records of receipts and disbursements have been carefully examined, and the items of disbursements have been classified under heads, showing the amount of expenditures each year for Salaries, Building, Library, Cabinet, &c., &c.

Erom the manner in which bills have been made up, it would be quite impossible to make a perfect classification of the expenditures. The tables of items herewith submitted, are, however, believed to be nearly correct.

From the first organization of the institution, February 5th, 1849, till January 1st, 1851, no blank book of warrants, in the usual form, was kept by the Secretary.

All orders, however, of this officer, upon the Treasurer, appear to have been paid. Since the 1st of February, 1847, the demands against the institution have been paid by the issuing of warrants in the usual form, and the stubs have all been preserved, although warrants amounting, in the aggregate, to about $28,000, are not found among those which have been cancelled, and are now in the possession of the Secretary. The missing warrants are mostly those which were issed during the year 1851, '52 and '53. Your committee have no boubt that all of these warrants have been cancelled. The records of the Treasurer show this to be a fact. The warrants, after cancellation, were probable burned, or otherwise destroyed, in accordance with a custom which at one time prevailed, of destroying county orders, after cancellation.

Bills for nearly every item of expenditure have been found. In a few instances, these bills were made up in such a manner as to give no distinct idea of character of service rendered, or the materials furnished, but the endorsements of all these accounts show that they were ordered paid by the Executive Committee.

In 1855, an ordinance was passed for the organization of the Department of Medicine. The several chairs in that Department were filled by the appointment of a Medical Faculty, and in 1857, the sum of $600 was appropriated to that department for specific objects. Five hundred dollars of this appropriation was drawn by the late Doctor Schue, an officer of the Faculty. Dr. Schue, shortly after receiving the money, paid it over to Dr. A. L. Castleman, who was Dean of the Medical Faculty.

The only explanation which your committee have in regard to the expenditure of this money, is contained in a letter of Dr. Castleman, which has already been submittee to the Board. All the appropriations for specific objects, with the above exception, have been accounted for in a satisfactory manner; bills having been rendered, setting forth the manner and number of articles purchased, and the price paid for the same. The Treascrer's books have been carefully examined, and the annual reports of this officer to the Board are found to be correct. When William N. Seymour retired from the office of Treasurer, there was a balance against him of $179 34. This amount has not yet been paid.

From the footings of the table of annual expenses, from the organization of the Institution, to December 31, 1850, it appears that the amount of salaries paid Professors, Tutors and Steward, is	$65,055 57
Cost of buildings, including warrants issued prior to July 1st, 1860, ($29,836 81)	101,631 27
Cost of Printing, ...	1,453 93
Paid for Library, ...	1,954 00
Paid for fruit and ornamental trees, ...	293 40
Paid for Cabinet and Apparatus, ...	5,293 61
Fees and salary of Secretary and Treasurer, . . .	3,976 66
Paid for wood, ...	5,957 27
Labor on the grounds, &c., ...	3,660 67
Sundries, principally explained by marginal notes. [This includes the purchase of lands in Madison.] . .	9,844 04
Total disbursements, exclusive of interest and insurance,	$199,122 42

The recources of the University, at the close of the year 1859 are, amount due on sales, ...	$232,219 21
Amount due on loans, ...	53,094 50
Aggregate productive fund, ...	$285,813 71
Which, at 7 per cent., yields an income of . . .	$1,971 96

The loss of the University Fund by loaning on poor securities, amounts to only $600; and this is not all a loss, for the securities are probably worth one-half this amount.

The full amount of one hundred and forty-four sections of land, granted to the State for University purposes, has all been selected and approved. Of this amount, there remains unsold 17,682 70 acres.

At an early day the Regents purchased the present Umiversity site, togetner with adjoining lands, at a cost of $5,001 20.

The adjoining lands have been sold for $12,684 90. Thus the present site was securred, and there was added to the fund, $7,682 70.

The indebtedness of the University, on the 26th of June last, was as follows:

Loan from the School Fund, ...	$30,000 00
Loan from the University Fund, ...	32,510 00
Loan from J. D. Ledyard, (8 per cent.) . . .	5,000 00
Loan from General Fund, ...	10,000 00
	$77,510 00
Outstanding 10 per cent. time warrants, . . .	17,636 81
Total, ...	$95,146 81

The annual interest on this debt is $7,239 70.

Detucting the interest to be paid from the available income, and we have to meet current expenses, exclusive of tuition, $12,732 58.

H. C. HOBART,
NELSON DEWEY,
M. M. DAVIS,
Committee.

CATALOGUE

OF THE

OFFICERS AND STUDENTS

OF THE

WISCONSIN STATE UNIVERSITY,

FOR THE YEAR ENDING JUNE 27TH, 1860.

BOARD OF REGENTS.

HENRY BARNARD,	Chancellor, *ex-officio*,	Madison.
LOUIS P. HARVEY,	Sec'y of State, *ex-officio*,	Madison.
J. L. PICKARD,	Sup't of Pub. Inst., *ex-officio*,	Madison.
ALFRED L. CASTLEMAN,	Term expires Jan. 1861,	Milwaukee.
NATHANIEL W. DEAN,	" "	Madison,
SAMUEL L. ROSE,	" "	Watertown.
LEVI B. VILAS,	" "	Madison.
JOHN G. McMYNN,	Term expires Jan. 1863,	Racine.
B. E. HUTCHINSON,	" "	Prairie du C.
CARL SCHURZ,	" "	Milwaukee.
HORACE A. TENNEY,	" "	Madison.
O. M. CONOVER,	Term expires Jan. 1865,	Madison.
MOSES M. DAVIS,	" "	Portage City.
NELSON DEWEY,	" "	Platteville.
HARRISON C. HOBART,	" "	Chilton.
JAMES D. RUGGLES,	*Secretary*,	Madison.
NATHANIEL W. DEAN,	*Treasurer*,	Madison.

FACULTY.

HENRY BARNARD, LL.D.,
CHANCELLOR.

……………………………………*
Professor of Ethical and Political Science.

DANIEL READ, LL.D.,
Professor of Mental Science, Logic, Rhetoric and English Literature.

JOHN W. STERLING, A.M.,
Professor of Mathematics and Natural Philosophy.

EZRA S. CARR, M.D.,
Professor of Chimistry and Natural History.

DAVID BOSWELL REID, M.D., F.R.S.E.,
Professor of Physiology, and Hygiene, and Director of Museum of Practical Science,

JAMES D. BUTLER, A.M.,
Professor of Ancient Languages and Literature.

JOSEPH C. PICKARD, A.M.,
Professor of Modern Languages and Literature.

THOMAS D. CORYELL, A.M.,
Instructor in Surveying and Engineering.

DAVID H. TULLIS,
Instructor in Commercial Calculations and Book-keeping.

O. M. CONOVER, A.M.,
Principle of Preparatory Department in Public High School.

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* Vacant by the resignation of J. H. LATHROP, LL.D.

GRADUATING CLASS, JUNE 26, 1860.

NOTE.—C, Classical; S, Scientific; P, Preparatory.

NAME.	COURSE.	RESIDENCE.
George W. Bird,	C	Madison.
Leander M. Comings,	C	East Eddington, Me.
Thomas J. Hale,	C	Racine.
John B. Parkinson,	C	Fayette.
William P. Powers,	C	Madison.
Meilan W. Serl,	S	Springfield.
Fred. T. Starkweather,	C	Milwaukee.
John E. Sutton,	C	Hanchetville.

UNDERGRADUATES.

(ALPHABETICALLY ARRANGED.)

NOTE.—C, Classical; S, Scientific; P, Preparatory, † Studying Latin.

NAME.	COURSE.	RESIDENCE.
John S. Abbott,	P	Madison.
Gideon W. Allen,	S	Trempeleau,
Arthur E. Arnold,	P	New Rutland, Ill.
Benj. D. Atwell,	P	Madison.
Wm. P. Atwell,	P	"
Farlin Q. Ball,	S	Monroe.
Wm. H. Ball,	P	"
John W. Blake,	S	Jefferson.
Geo. W. Bird,	C	Madison.
M. Leonard Bradley,	P	"
Jas. B. Britton,	C	"
Elliott K. Brown,	S	Fond du Lac.
Gustavus H. Bryant,	S	Lake Mills.
James H. Bull,	C	Middleton.
James D. Butler,	P	Madison.
Norman C. Butler,	P	Tallahassee, Fla.
Richard Butler,	S	Cambridge.
James Byrne,	P	Madison.
Cary M. Campbell,	S	"
William Campton,	P	Mineral Point.
Geo. W. Carter,	S	Fair Water.
Chas. C. Chittenden,	P	Madison.
William W. Church,	C	"
Geo. F. Clark,	S	Lamartine.
James Clark,	S	Montrose.
Phineas J. Clawson,	C	Waukesha.
Webster J. Colburn,	P	Jefferson.
Leander M. Comins,	C	East Eddington, Me.
Ezkiel L. Craton,	P	Monroe.
Joseph Curtis,	P	Richland.
Wm. S. Davenport,	C	Monroe.
Henry C. De Forest,	C	Madison.

NAME.	COURSE.	RESIDENCE.
Elias B. Delamatyr,	P	Middleton.
Arthur Demming,	P	Terre Haute, Ill.
Edwin Alis De Wolf,	P	Madison.
Frank P. De Wolf,	P	"
John Dow,	S	Cambridge.
Melvill Eggleston,	P	Madison.
Braiser R. Ellis,	P	Westport.
William Fallows,	P	Hanchettville.
Edward J. Foster,	S	Mayville.
Dwight P. Frank,	P	Hanchettville.
Philander W. French,	S	Fitchburg.
Almerin Gillett,	S	Geneva.
Henry L. Gray,	P	Madison.
Peter Greeley,	S	Monroe.
Milton S. Griswold,	C	Waukesha.
Joseph L. Griswold,	P	Caldwell's Prairie.
Ambrose A. Grant,	P	Fall River.
Thomas J. Hale,	C	Racine.
Azariah S. Hall,	C	Hanchettville.
Joseph G. Hall,	P	Monroe.
Brant Hammond,	S	Verona.
Thomas M. Haynes,	S	Black Earth.
Henry H. Helms,	S	Fitchburg.
Robt. H. Henry,	S	Verona.
James L. High,	P	Black Earth.
Theodore May Hobby,	P	Madison.
Geo. B. Hopkins,	P	"
Alonzo G. Jack,	P	"
Jay Jennings,	P	Caledonia.
Brown C. Johnson,	P	Madison.
Chas. D. Jones,	P	"
Eugene A. Jones,	P	"
John L. Joyce,	S	"
Perrin C. Judkins,	P	"
Clarence O. Kellogg,	P	"
Oscar H. LaGrange,	S	Ripon.
Michael Leahey,	C	Portland.
John Leahey,	S	"
Geo. M. Leland,	C	Ottawa, Ill.
Herbert A. Lewis,	S	Windsor.
Jas. O. Lyman,	S	Hartford.
Fielding Mansfield,	S	Madison, Indiana.
Robt. Mac McBride,	S	Mansfield, Ohio.
Benj. F. McCormick,	P	Madison.

NAME.	COURSE.	RESIDENCE.
Aaron McCracken,	S	Monroe.
Andrew J. McFarlane,	C	Portage.
Jefferson C. McKinney,	S	North Leeds.
Edward G. Miller,	P	Sweet Home.
Henry C. Miller,	P	Monroe.
John N. O'Brien,	P	Cascade.
Wiilliam L. O'Connor,	S	Ripon.
Ceylon Henry Olney,	P	Madison.
Torge J. Olesen,	P	“
Orlando B. Orton,	P	“
Otho S. Orton,	P	“
Obed A. Palmer,	C	Milwaukee.
John B. Parkinson,	C	Fayette.
John D. Parkinson,	C	Madison.
Samuel Porter,	C	Tonica, Ill.
William P. Powers,	C	Madson.
James Sans. Prentis,	P	Milwaukee.
Miron H. Puffer,	S	Jefferson.
Volney Rattan,	S	Morefield.
Edward Harrison Reed,	P	Madison.
Hugo A. B. Reid,	P	“
Otis Remick,	S	Cornish, Me.
R. A. Remick,	S	Detroit, Mich.
Stark S. Reque,	C	Deerfield.
Peter S. Repue,	P	“
Orson Rice,	P	Origon.
William Risk,	S	Easton.
Augustus H. Salisbury,	P	Origon.
William A. Salisbury,	S	Ghent, Ohio.
Jotham Scudder,	P	Juda.
Milan W. Scrl,	S	Springfield.
William T. Shrewsbury,	S	Madison, Indiana.
Harrison W. Sigworth,	S	Fryburg, Penn.
Edwin Dwight Simmons,	P	Lake Mills.
Almon Smith,	S	Monroe.
Algemon Sidney Smith,	S	Louisville, Ky.
Henry D Smith,	C	Verona.
John M. Smith,	P	Monroe.
William E. Spencer,	C	Madison.
James C. Spencer,	P	“
Albert T. Spooner,	P	Rutland.
John C. Spooner,	P	Madison.
Asher Starkweather,	P	Columbus.
Fred. S. Starkweather,	C	Milwaukee.

NAMES.	COURSE.	RESIDENCE.
William C. Stevens,	P	Madison,
Isaac N. Stewart,	S	Waukesha.
James W. Stillman,	S	Westerly, R. I.
Emory F. Stone,	P	Oxford, Mass.
John E. Sutton,	C	Hanchettville.
J. Dwight Tredway,	C	Madison.
Thomas Van Matre,	P	“ “
Henry Vilas,	C	Mineral Point.
Levi M. Vilas,	C	“ “
Chas. H. Vilas,	P	“ “
Washington I. Wallace,	P	“ “
Samuel H. Watson,	S	Baraboo.
Daniel Le Roy Webster,	P	Foulton.
Chandler S. Whittier,	S	Madison.
Conelius E. Williams,	S	Markison.
Daniel G. Williams,	P	Sweet Home.
Edwin E. Woodman,	S	Monroe.
William Wyse,	P	Sauk City.

COMMERCIAL CLASS.

NAME.	RESIDENCE.	
Benj. F. Atwell,	Madison,	Wisconsin.
E. P. Brooks,	“	“
Wilmot Booth,	“	“
William Booth,	“	“
F. B. Bryant,	“	“
J. S. Babcock,	Columbus,	“
Wm. S. Bradbury,	Madison,	“
N. C. Butler,	“	“
H. D. Cox,	Milford,	“
C. P. Chapman,	Madison,	“
F. C. Corbett,	Corbettsville,	New York.
A. A. Dutcher,	Madison,	Wisconsin.
Sam'l Fernandez,	“	“
K. J. Fleisher,	“	“
John Fleischer,	“	“
D. Fernandez,	“	“
P. W. French,	“	“
F. C. Fester,	“	“
W. H. Filkins,	“	“
E. D. Griswald,	“	“
E. B. Guild,	Lawrence,	“
Arthur Gleason,	Madison,	“
Neil Howie,	“	“
Paul Halverson,	Cottage Grove,	“
Joseph Heathcock,	Linden,	“
Wm. C. Jackson,	Madison,	“
A. J. Jackson,	“	“
C. Judkins,	“	“
Charles Jones.	“	“
C. H. Kellogg,	“	“
Clarence Kellogg,	“	“
T. M. Lewis,	“	“
Frederick La Rogee,	“	“
Chas. Miller,	“	“

NAME.	RESIDENCE.	
A. Menges,	“	“
J. G. Memhard,	“	“
Wm. P. McConnell,	“	“
Jas. M. McDowell,	“	“
Edwin Marsh,	Beaver Dam,	“
John McNaughton,	Madison,	“
Wm. McNamara,	“	“
Arthur Mills.	“	“
J. A. McConnell,	“	“
Jas. D. McBribe,	Mansfield,	Ohio.
Edwin Noyes,	Madison,	Wisconsin.
Otho H. Orton,	“	“
Geo. K. Powers,	“	“
Wm. P. Powers,	“	“
Warham Parks,	“	“
John Reynolds,	“	“
Addison Randall,	“	“
Frank Smith,	“	“
D. K. Slaven,	“	“
J. M. Sumner,	“	“
Wm. H. Sleighton,	“	“
J. M. South,	Monroe,	“
H. H. Virgin,	Platteville,	“
Edward Voight,	Madison,	“
Wm. F. Welling,	Black Earth,	“
Horace Warner,	Sun Prairie,	“

MEMBERS OF THE NORMAL CLASS.

LADIES.	RESIDENCE.		
Martha A. Chamberlain,	Dane	County.	
Mary H. Chamberlain,	“	“	
Hannah J. Crocker,	“	“	
Frances J. Duncan,	Rock	“	
Hennetta Davis,	Dane	“	
M. M. Luness,	“	“	
Kate Kavenaugh,	“	“	
Louisa Larkin,	“	“	
Julietta S. Mann,	“	“	
Mary E. Peaslee,	“	“	
Fannie C. Quiner,	“	“	
Rosa Rogers,	“	“	
H. A. Sweeney,	“	“	
Sarah E. Farner,	“	“	
Helen J. Tripp,	Columbia	“	
Lydia Sharp,	Dane	“	
Henrietta I. Lovewell,	“	“	
Mrs. E. K. Hooker,	“	“	
Josephine M. Rice,	Grove	“	Illinois.
Laura D. Barron,	Pepin	“	Wisconsin.
Hattie A. Hough,	Dane	“	“
Emily C. Quiner,	“	“	“
Amanda Wright,	“	“	“
Sophia O. Smith,	“	“	“
Lottie Lattimer,	“	“	“
Hattie Vroman,	“	“	“
L. M. Powley,	“	“	“
R. J. Spooner,	“	“	“
M. M. Quiner,	“	“	“
Lucy L. Cowes,	“	“	“
GENTLEMEN.			
J. S. Babcock,	Columbia	“	“
E. F. Brown,	Dane	“	“
Norman O. Butler,	“	“	“
B. R. Ellis,	University,		

GENTLEMEN.	RESIDENCE.		
James R. Hanan,	Dane	County	Wisconsin.
Lyman Hutchinson,	“	“	“
John J. Lewis,	Iowa	“	“
J. O. Lyman,	Wash'ton	“	“
A. Starkweather,	Columbia	“	“
Isaac N. Stewart,	Waukesha	“	“
M. A. Strong,	Columbia	“	“
W. A. Delamatyr,	Dane	“	“
W. H. Ball,	Green	“	“
J. C. McKenney,	Columbia	“	“
H. W. Ligworth,	Green	“	“
A. Gillett,	Walworth	“	“
F. Q. Ball,	Green	“	“
L. M. Comins,			“
M. H. Paffer,			“
Wm. Risk,	Adams	“	“
Richard Butler,	Dane	“	“
Emory F. Stone,	Dane	“	“
O. Remick,	Dane	“	“
R. A. Remick,	“	“	“
A. H. McCracken,	Green	“	“
J. L. Potter,	Dane	“	“
J. L. High,	“	“	“
S. H. Watson,	“	“	“
J. S. Lovewell,	“	“	“

SUMMARY.

Classical,	27
Scientific,	47
Preparatory	64
Commercial,	60
Normal Class, Ladies,	30
" " Gents	29
In all Departments,	257
Twice Counted,	29
Total Number of Students,	228

CIRCULAR

OF THE

WISCONSIN STATE UNIVERSITY,

FOR THE

YEAR 1861,

SUBJECTS OF INSTRUCTION

CLASSICAL COURSE.

First Year.

First Term.—Algebra—Loomis'.
Livy—Lincoln's.
Xenophon's Memorabilia—Robbins.
History of United States.
Second Term.—Solid Geometry—Loomis'—Plane Trigonometry—Loomis'.
Mensuration, Surveying, Navigation--Loomis.
Horace—Odes.
Homer—Iliad—Owen's.
English Language.

Second Year.

First Term.—Analytical Geometry—Smith's.
Horace—Satires.
Homer—Iliad—Owen's.
French—Fasquelle's French Course.

Second Term.—Differential Calculus—Smith's.
Integral Calculus— "
Tacitus—Annals.
Æschylus—Prometheus.
French—Robertson's Method.
Exercises in French Conversation.
Racine's Athelie and Phedre.

THIRD YEAR.

First Term.—Mechanical Philosophy—Peck's.
General Physics—Lectures.
Tacitus—Germania and Agricola.
Demosthenes—De Corona.
Rhetoric.
English Literature.
Mental Philosophy.

Second Term.—Spherical Trigonometry—Loomis'.
Astronomy—Robinson's and Loomis'.
General Physics—Lectures.
Juvenile and Persius.
Plato—Gorgias, or the Clouds of Aristophanes.
Mental Philosophy.
Logic.

FOURTH YEAR.

First Term.—Chemical Philosophy.
Inorganic Chemistry.
Ethics.
International Law.
Civil Polity.
History of Philosophy.
Christian Evidences.

Second Term.—Organic Chemistry.
Geology.
Botany.
Constitutional Law.
Political Economy.
History of Civilization.
Physiology of Public Hygiene.

SCIENTIFIC COURSE.

A course of study, under the above designation, equivalent to the classical course, occupying four years, has been established by an ordinance of the Board of Regents for the benefit of such students as desire to substitute advanced scientific studies for the Latin and Greek languages. It includes all the studies of the classical course, except the ancient languages; and in addition, the German language, and the Applications of

Science to Agriculture, Architecture, Mining, Surveying, Engineering, Public Health, &c.

The following table exhibits the subjects of study in this course for the year, arranged by terms:

FIRST TERM.	SECOND TERM.
Algebra.	Plane Trigonometry and Applications.
Solid and Spherical Geometry.	
Analytical Geometry.	Differential and Int. Calculus.
Mechanical Philosophy.	Spherical Trig. and Astrono'y.
Natural Philosophy.	Natural Philosophy.
Inorganic Chemistry.	Organic Chemistry.
History.	Geology, Botany.
Rhetoric.	Constitutional Law.
English Literature.	Political Economy.
History of Philosophy.	History of Civilization.
Christian Evidences.	English Language.
Ethics.	Mental Philosophy.
Internation Law.	Logic.
Civil Polity.	Physiology, Public Hygiene &c
Practical Surveying, Engineering, Drafting, &c.	Practical Surveying, Engineering, Drafting, &c.
Speaking and Composition.	Speaking and Composing.
French Language.	French Language.
German Language.	German Language.

The subjects of study belonging to the Department of Science, Literature and the Arts, are discussed under the following heads; each one of which is placed under the charge of a Professor, with such assistance as may be necessary, who is responsible for the progress and attainments of the students therein:

ETHICAL AND POLITICAL SCIENCE.

[Chair vacant.]

The instructions of this chair are rendered in course, to subgraduates of the fourth year, and to such other students of the University as elect to attend. The subjects of instruction are eminently adapted to prepare the student to become a good and useful citizen of the Republic, and to fit him for civil service in the same. The course ocupies a year, one exercise each day, as follows:

ETHICS—Moral Obligation; Development of Moral Law; Sanctions of Moral Law; Practical application of the Science.

The text-book, Wayland's Elements of Moral Science, is used, merely as suggesting a convenient series of topics for oral lecture, and for familiar discussion in class.

CIVIL POLITY—Political Ethics; Science of Government; The American Constitution; International Law; History of Civilization.

This class of subjects is taught wholly by lecture, with intermediate examination and discussion. The student is required to write out his views on each topic, and at stated periods, to read his results before the class.

POLITICAL ECONOMY---Production of Material Wealth; Distribution; Exchange and Consumption; Applications of the Science; Relations to Civilization.

The discussion of this subject in class, is in the order of topics suggested by Say in his Treatise on the Production and Consumption of Wealth.

MENTAL PHILOSOPHY, LOGIC, RHETORIC, AND LITERATURE.

DANIEL READ, LL. D., *Professor.*

The instructions of this chair are rendered to subgraduates of the first, third and fourth years. An *extra* course on English Literature will be given annually to students not of the regular classes.

The course of instruction in *Intellectual Philosophy*, embraces an analysis of the powers of the human mind, *active* and *moral*, as well as those denominated *intellectual*, the examination of those powers in reference to criticism, to teaching, to the improvement of the individual and the progress of society. It includes also, a critical review of the systems of philosophy, which have prevailed among men.

Logic is taught as to its principles and application; an outline of the laws of evidence and human belief is given; and in connection with this part of the subject, the evidences of Christianity are examined.

Rhetoric, so far as it relates to the subject of *invention* and *disposition*, is taught by lectures, upon the basis of Quintilian and Cicero; and as regards *style* and *criticism*, upon that of modern writers.

In the course of English Literature are included the history of the English language, an examination of its elements, powers and grammar, and the history of English Literature in its various departments.

In *history*, Webber's outlines will be used as a text-book. and a course of lectures will be given on the civil history of the United States.

The course in this department for the term beginning February 8th, will be the following:

I. Mental Philosophy—Embracing analysis of the faculties of the human mind, *active* and *moral*, as well as those denominated *intellectual;* examinations of these powers in reference to criticism, to teaching, to the improvement of the individual and the progress of society.

The course embraces a critical review of the systems of Philosophy which have prevailed among men.

The instruction of the department is conducted by means of text-books (Haven) and lectures. The student is required to give orally or upon the blackboard, an analysis of every subject, as well as to prepare carefully written abstracts and dissertations upon assigned topics. Hour from 10—11 A. M.

II. Class in English—History of English Language; its composition, grammar structure of sentences, punctuation. History of the progress of English Literature in its various departments. Hour 11—12—A. M.

III. Speaking and Compositon—All students required to engage in these exercises. 3. P. M.

MATHEMATICS AND NATURAL PHILOSOPHY.

J. W. STERLING, A. M., *Professor.*

COURSE OF STUDY.

FIRST YEAR.

Terms.
1. Algebra—Loomis.
2. Solid and Spherical Geometry—Loomis; Plane Trigonometry—Loomis; Mensuration, Surveying and Navigation—Loomis.

SECOND YEAR.

Terms.
1. Analytical Geometry—Smith's.
2. Differential and Integral Calculus—Smith's.

THIRD YEAR.

Terms.
1. Mechanical Philosophy—Peck's; General Physics (Lectures.)
2. Spherical Trigonometry—Loomis; Astronomy—Robinson and Loomis; General Physics, (Lectures.)

For admission to this course, candidates will, in future, be required to have a thorough knowledge of Arithmetic, Mental and Written; The Elements of Algebra, (Ray's) and Plane Geometry, (Loomis'.)

In this department there is one exercise daily for three years.

To secure thoroughness there will be frequent reviews, and written examinations on the subjects passed over.

On the various subjects of General Physics or Natural Philosohy, there will be weekly, extending throughout the year, at least two lectures accompanied by experimental illustrations. All who choose are permitted to attend these exercises.

Each regular member is expected to take notes of the lectures, and is frequently required to lecture on subjects previously discussed by the professor, repeating the experiments. This exercise is deemed important to cultivate in the student the habit of investigation and facility in communicating his knowledge.

Books of Reference in Natural Philsophy.—Loomis, Lardner, Silliman, Olmstead, Arnott, Muller, Library of Useful Knowledge, Brewster (Optics), Hershell (Light and Sound), Jackson, (Optics.)

CHEMISTRY, NATURAL HISTORY AND THEIR APPLICATIONS.

EZRA S. CARR, A. M., M. D., *Professor.*

The instruction in this department is given by lectures and demonstrations on the part of the professor and students, together with examinations.

The recitation of the student consists in his giving a lecture, illustrated with experiments and demonstrations on the same subject and after the manner of the Professor, thus not only requiring an intimate knowledge of the subject discussed, but at the same time the faculty of communicating his knowledge.

The subjects discussed embrace a full illustration of all the topics of theoretical or practical importance, and their applications to the useful arts, the processes of common life, Agriculture, Philosophy, &c.

FIRST TERM.

Chemical Philosophy, Chemistry of the Non-Metalic Elements, Fuel, Heating, Lighting, Ventilation, &c.

SECOND TERM.

Chemistry of the Metals and Metaullurgy, Organic Chemistry, including the Chemistry of Animal and Vegetable Life; the Preparation, Preservation, Uses of Food, &c.

BOTANY.—The Plant being first considered as an individual in reference to the nature and processes of vegetable life; Second, its relation to other plants, or the Vegetable Kingdom; Third, its uses.

GEOLOGY.—Considered especially in relation to the uses of rocks, and their relations to useful minerals.

TEXT BOOKS.

CHEMISTRY.—Able & Bloxam, Regnault, Gmelin, Johnston's Chemistry of Common Life, Youman's Hand Book of Household Science, Knapp's Technology.

BOTANY.—Wood, Grey's Works, Lindley's Vegetable Kingdom.

GEOLOGY.—Hitchcock's, Lyell, Delabeche, Geological Reports of the different States.

ANCIENT LANGUAGES AND LITERATURE.

JAMES D. BUTLER, A. M. PROFESSOR.

COURSE OF STUDY.

FIRST YEAR.

Latin.

Terms.
1. Livy.
2. Horace—Odes.

Greek.

Terms.
1. Xenophon—Memorabrilla--Robbins' Edition.
2. Homer—Iliad—Owen's Edition,

SECOND YEAR.

Latin.

Terms.
1. Horace—Satires.
2. Tacitus—History.

Greek.

Terms.
1. Homer—Iliad.
2. Æschylus—Prometheus.

THIRD YEAR.

Latin.

Terms.
1. Tacitus—Germania and Agricola.
2. Juvenal.

Greek.

Terms.
1. Demosthenes de Corona.
2. Plato—Gorgias.

The grammars used, are Crosby for Greek, and Andrews' (Revised Ed.) for Latin. For all but the most advanced students, the new Latin Dictionary by Crooks and Schem is recommended as by far the best.

Classical Geography will be illustrated by Kiepert's mural maps, the whole series of which hangs in the class-room. The light always radiating from words upon things, as on religion, art, philosophy, nationality, ind the whole manner of ancient life, will be daily traced. No pains will be spared to make the classical languages elucidate our own vernacular. Throughout the curriculum, the study will be an exercise, not of mere verbal memory, but of philosophical memory, of discrimination, of rendering reasons, and of research concerning things, no less than words.

The time needful for completing this course will vary with the dilligence and previous attainments of students.

Among the reference books which it is desirable that philological students should have on their tables—in addition to the grammars, of Crosby for Greek, and Andrews for Latin, and Liddell and Scott for Greek, may be mentioned:

Rich's Companion to the Latin Dictionary and Green's Lexicon.

Smith's Dictionary of Greek and Roman Geography, Biography, Mythology anp Antiquaries. 6 vols. 8vo.

Doederlein's Latin Synonymes.

Finlay's Classical Atlas.

Becker's Gallus and Charicles.

MODERN LANGUAGES AND LITERATURE.

J. P. Fuchs, M. D., Professor.

COURSE OF STUDY.

Regular instruction will be given in the French and German Languages and Literature.

To the study of French, the student's attention will be constantly called to the etsmological analogies of the Latin and French languages.

Extra instruction when desire, in Spanish and Italian.

French.

First Term.—Fasquelle's Course.

Second Term.—Robertson's Method. Exercises in French Conversation, Racine's Athalie and Phedre.

German.

FIRST YEAR.

First Term.—Ahn's Method.

Second Term.—Ahn's Method. Adler's Handbook.

SECOND YEAR.

First Term.—Fiark's Grammar. Schiller's Ballads and Plays.

Second Term.—Schiller's Plays. Goethe's Faust. Translations into German.

BOOK-KEEPING AND COMMERCIAL CALCULATIONS.

DAVID H. TULLIS, INSTRUCTOR.

This School has for two years been in successful operation in the City of Madison under the denomination of "Bacon's Commercial College." It is now a part of the University, and will soon be transferred to the rooms designed for it in the main edifice. At present rooms are occupied in Bruen's Block. The course of study consists of,

1st. Single and Double Entry Book-Keeping, embracing the various departments of Trade and Mercantile accounts, viz: Wholesale and Retail, Stock and Partnership Books, Shipping, Steam Boating, Railroading, Banking, Manufacturing, Commission, Joint Stock and Company Business.

2d. Commercial calculations, comprising the system of calculations appertaining to Percentage, Equation of Payments, Compound Equations, Exchange, (Domestic and Foreign,) Arbitration of Exchange, General Average, Arbitration of Merchandise, Tonnage of Vessels, Storage, and Custom House Transactions.

3d. Business Penmanship.

4th. Commercial Forms and Correspondence, including Forms of Invoices, Accounts current, Account Sales, Bills of Lading, Promissory Notes, Orders, Checks, Drafts, Bills of Exchange, Articles of Copartnership, and Business Letters.

5th. Lectures on Customs of Merchants, Rules of Trade, Commercial Law, Political Economy, &c., &c.

It is the purpose of the Board of Regents in the establishment of this Instructorship, to afford the student an ample opportunity to qualify himself for prosecuting the Mercantile Profession in any Department, and to any extent.

Students are taught separately, and not in classes, and can enter at any time they choose.

PREPARATORY DEPARTMENT.

Experience in this University, as in our Western Universities generally, has demonstrated the necessity of provision for instruction in branches which are properly preparatory to the different University courses. Young men of mature age often come to the University for instruction in some of its appropriate subjects, who wish also to perfect themselves in more elememtary branches. To close the doors of the University upon this class of young men, or not to affored them the facilities of instruction which they need, would be greatly to limit the sphere of its usefulness as a State Institution.

Provision is therefore made for full preparatory instruction, at the University Buildings. This instrction, under the direction and supervision of the Faculty, will be rendered by a competent Tutor. Those wishing preparation for the regular classes, merely a business education, or improvement in preparatory studies, with reference to teaching, will find within the University instruction adapted to their especial wants.

Students, of a suitable age, in this department, are allowed to occupy rooms in the University buildings.

TERMS OF ADMISSION.

Candidates for admission to the first year of the *Classical Course*, must pass a satisfactory examination in the Common Branches, the elements of Algebra (Ray's), Plane Geometry, (Loomis'), Latin Reader, Cæsar or Cornelius Nepos, Virgil's Aeneid, (6 books; the edition of Frieze is prefered as far the best), Crosby's Greek Lessons, and the Aanbasis of Xenophn.

Instead of these particular works in Latin and Greek, any equivalent will be accepted.

For admission to the first year of the *Scientific Course*, the requirement is the same as for the Classical Course, ommitting the Ancient Languages.

Candidates for advanced standing are also examined in the studies to which the class they propose to enter, have attained.

Such as desire to pursue a select course, will be admitted to any of the recitations for which they may be prepared.

Applicants for admission must present testimonials of good moral character.

It is provided in the by-laws, that no student shall be admitted by the Chancellor to residence in the buildings, or to the exercises of any term, till the charges for tuition, and room for study and lodging, shall have been paid, in advance.

RECITATIGNS, Etc.

Each class attends three recitations or lectures, daily. There are also frequent exercises in declamation and composition.

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2d. Commercial calculations, comprising the system of calculations appertaining to Percentage, Equation of Payments, Compound Equations, Exchange, (Domestic and Foreign,) Arbitration of Exchange, General Average, Arbitration of Merchandise, Tonnage of Vessels, Storage, and Custom House Transactions.

3d. Business Penmanship.

4th. Commercial Forms and Correspondence, including Forms of Invoices, Accounts current, Account Sales, Bills of Lading, Promissory Notes, Orders, Checks, Drafts, Bills of Exchange, Articles of Copartnership, and Business Letters.

5th. Lectures on Customs of Merchants, Rules of Trade, Commercial Law, Political Economy, &c., &c.

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Instead of these particular works in Latin and Greek, any equivalent will be accepted.

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Such as desire to pursue a select course, will be admitted to any of the recitations for which they may be prepared.

Applicants for admission must present testimonials of good moral character.

It is provided in the by-laws, that no student shall be admitted by the Chancellor to residence in the buildings, or to the exercises of any term, till the charges for tuition, and room for study and lodging, shall have been paid, in advance.

RECITATIGNS, Etc.

Each class attends three recitations or lectures, daily. There are also frequent exercises in declamation and composition.

and guardians are particularly requested to make suitable arrangements in this regard, as no supervision on the part of the Faculty, can form an adequate substitute for the regular habits of the family.

EXPENSES.

Tuition per term of 20 weeks	$6 00
Room " " " "	5 00
Fuel " " " "	5 00

Those who do not occupy private rooms are charged $2 for fuel, besides tuition fees.

The above items comprise all University charges—except for damages acually done by stunents—and must in all cases be paid *in advance.*

The charge for a full course in the commercial college, time unlimited, is	$25 00

Good board, in private families, can be obtained for, from $1 50 to $2 50 per week; in clubs, from $1 00 to $1 50 per week.

ABSENCE.

The importance of punctual and continued attendance of students, from the beginning to the end of each term, cannot be too highly estimated. The loss of a single day bears unfavorably on the character and the progress of the scholar. The distribution of vacations, and their aggregate length, leave no justificatiou for the encroachment upon term time by further unnecessary absence. It is to be hoped that parents and guardians will concur with the Faculty in refusing leave of absence in ordinary cases.

CALENDAR FOR 1861.

Second Term begins	Wednesday, Feb. 6.
Commencement Anniversary at the the close of second term	Wednesday, June 26.
First Term begins	Wednesday, Aug. 7.
" " closes	Wednesday, Dec. 18.

Communications addressed to Prof. J. W. Sterling, respecting board, rooms, and other particulars, will receive prompt attention.

THIRTEENTH

ANNUAL REPORT

OF THE

BOARD OF REGENTS

OF THE

UNIVERSITY OF WISCONSIN,

FOR THE YEAR ENDING

SEPTEMBER 30th, 1861.

MADISON, WIS:
SMITH & CULLATON, STATE PRINTERS—ARGUS OFFICE.
1861.

FOURTEENTH ANNUAL REPORT

OF THE

Board of Regents of the State University,

For the Year Ending Sept. 30, 1861.

STATE OF WISCONSIN,
SECRETARY'S OFFICE, MADISON, Oct. 10, 1861.

To His Excellency, ALEXANDER W. RANDALL,
Governor of Wisconsin.

SIR :—In compliance with the requirements of law, I have the honor to transmit to you, herewith, the Report of the Regents of the University of Wisconsin, and to remain,

Very respectfully, your obedient servant,
L. P. HARVEY,
President pro. tem. of the Board.

REPORT OF THE BOARD OF REGENTS.

To the Honorable, the Legislature of the State of Wisconsin:

The undersigned, committee appointed by the Board of Regents at the June session, to prepare and present the Annual Report required by the provisions of the Charter of the University of Wisconsin, have the honor to submit the FOURTEENTH ANNUAL REPORT of said Board of Regents, being for the fiscal year ending September 30th, 1861.

Despite the financial embarrassments and the distracting political events of the year, the Wisconsin University has well maintained its numbers and its usefulness.

The annual catalogue herewith presented (Appendix "E") contains the names of 180 students who have been connected with the University, in some one or more of its departments, during the collegiate year ending June 27th, 1861. Of this number 34 pursued the *classical* and 43 the *scientific* course prescribed by the Regents for the regular college classes, and 42 were connected with the preparatory department. Of these 119 (all who are strictly speaking students at the University.) 27 are residents of Madison; 83 came from other places within the State, and 9 are residents of other States. These facts of the residence of the pupils afford cheering evidence that the University is gradually extending the area of its influence and widening the sphere of its usefulness.

A communication from the Faculty is herewith submitted, presenting interesting statements of the internal condition of the University, and of the conduct of the students. Also, an earnest appeal for the establishment of a Military Department in connection with the University.

We invite the particular attention of the Legislature to this communication, which is Document "A" appended to this Report.

The Report of the Examining Committee selected by the Regents to attend the last Annual Examination of the University classes, is also appended (marked "B"); and we beg leave to call especial attention to the testimony so cordially volunteered therein, to the fidelity and ability of the gentlemen to whom this Board have confided the several chairs of instruction, as evinced by the thorough elementary training and mature scholarship of the respective classes passing under examination before the committee.

At the annual commencement in June last, the degree of *Bachelor of Arts* was, by vote of the Regents on recommendation of the Faculty, conferred upon James B. Britton, William W. Church, Azariah S. Hall, John D. Parkinson, William E. Spencer and Henry Vilas, on completion of the classical course; and the degree of *Bachelor of Philosophy* upon Farlin Q. Ball, Almerin Gillett, and Michael Lehay, who had completed the scientific course in the University.

The *Master's* degree was also conferred upon Sinclair W. Botkin and Charles Fairchild of the class graduated in 1857, and Richard Walter Hubbell, John William Slaughter, and William Freeman Vilas of the class of 1858.

FINANCIAL.

The Report of the Secretary of the Board is herewith presented (Appendix "C") setting forth the date and amount of each warrant drawn upon the Treasurer of the Board during the year, with the name of the person in whose favor the same was drawn, and the purpose to which the money was appropriated. The aggregate amount of warrants drawn on the Treasury during the year is shown to be $19,136.08.

Appendix "D" is the Annual Report of the Treasurer of the University—exhibiting, in detail, the receipts and disbursements of his office for the fiscal year ending September 30th, 1861—which may be classified and summarily stated as follows:—

RECEIPTS.

Balance in the treasury Oct. 1st, 1860	$840 92
Received from State Treasurer, on loans from the University Fund	6,300 00
Received from State Treasurer on income of the fund	16,921 70
Received in fees paid by Students	1,516 10
Received for sale of wood	28 38
	$25,607 10

DISBURSEMENTS.

For incidental expenses	$1,015 00	
For insurance	675 00	
For interest	7,023 91	
For fuel	730 00	
For mileage of Regents and examining committee	202 90	
For salaries and fees of Faculty, etc	7,575 79	
For buildings	606 35	
On indebtedness	6,050 90	
Cash on hand Oct. 1st	1,727 25	
		$25,607 10

The further sum of $5,000, borrowed of the principal of the University Fund, was retained by the State Treasurer, and in June last passed to the credit of the University on the loan of $10,000 to the University in the year 1858, from the General Fund of the State.

The resources of the University on the first day of October inst. stood as follows:

Amount due on certificates of sale	$203,813 22
Amount due on loans	58,135 44
Cash in the State Treasury	2,206 61
Total principal of the fund	$264,255 27

This principal at 7 per cent. interest yields an annual income of		$18,497 86
subject to charges, as follows:		
Share of clerk hire in Land Office	$800 00	
Proportion of expenses for land protection	169 47	
Printing for year ending Sept 30, 1861	69 61	
		$1,039 08
Leaving net income to University of		$17,458 78

The indebtedness of the University on the 1st of October inst. was:

On loans from the School Fund	$30,000 00
On loans from the University Fund	43,800 00
On loan from J. D. Ledyard (8 per cent.)	5,000 00
On loan from General Fund of the State	5,000 00
On outstanding ten per cent. time warrants	13,416 27
Total	$97,216 27

The annual interest on this debt is $7,257 62.

Subtracting the annual interest on the indebtedness of the University from the net income of its productive capital, leaves but $10,201 16. But even this remainder is charged by the several acts authorizing the University to contract loans, with providing a sinking fund of $2,500 00 per annum from and after the year 1860; to be increased to $4,000 00 per year from and after the year 1864. This leaves only $7,701 16 applicable to the current expenses of the present year, and but $6,201 16 from and after 1864. Even this remainder is liable to further reduction from forfeitures on loans and certificates at the sales this fall, and thus again at every succeeding sale until a return of prosperous times.

The expenses of conducting the University, as at present, without a Chancellor, with an inadequate instructional force, and transacting everything on a scale of the most rigid economy, are not less than $10,500 per annum; of which perhaps $1,500 may be anticipated from fees of students. It will hence appear at a glance that the University of Wisconsin has not the means to run at even the present limited scale of expenditure; and that the result of every year's attempt to continue as now, must result. as the past year, in an increase of indebtedness, either to the members of the Faculty on their salaries, or to other creditors.

The facts submitted show in ugly contrast to the roseate anticipations elaborated liberally in former reports by this Board to the Legislature. As late as 1858 the revenues of the University were estimated ample to pay the interest on its indebtedness, provide the sinking fund demanded by the first loan act, and from and after the year 1860, afford $14,250 00 a year to meet current expenses. This prospect is stated as certain to be realized for years to come, and the given income calculated as only "liable to *increase* from contingencies more or less remote."—(Report of 1858, page 16.)

It is submitted that the policy—adopted by the early movers in the organization of the University, and enjoined by the provisions of its charter—of providing grounds, buildings, and the entire outlay of preparation for a University from the income of its endowment, has *signally failed*. It might have been successful with a practice of that sensible patience and prudent economy which invest no faster than the accumulation of means in hand. In this way, some years $5,000, other years as high as $10,000, and even this year over $7,000 could have been invested annually in buildings, without impairing the usefulness of the institution. On this plan, buildings nearly or quite equal to those now provided would by this time belong to the University, without the incumbrance of owing for their cost; and the institution could at any time apply its entire income for current expenses, by suspending its operations in building. But as the case now stands, the University owes just about the amount that its buildings and grounds have cost; and its income, diminished through losses and forfeitures, does not yield sufficient to pay the interest upon its indebtedness; provide the annual sinking fund required by law for extinguishing its liabilities, and at the same time meet the current expenses of an institution at all proportionate to its preparations.

The sensible way of extricating the University from its present embarrassments, is for the Legislature to direct that the cost of buildings and grounds be paid from the *capital* of the fund, and thus leave the annual income of its net resources unencumbered. As the fund now stands, the appropriation of $100,000 to paying off existing indebtedness and putting the buildings in complete repair, with much needed preparations for receiving the collections by the Geological Survey of the State, would leave a productive endowment of $164,255 27; the annual interest of which, subject only to the cost of its management by the State, could be devoted to the current expenses of the University. This would afford the present year $10,457 78. This, with the income derived from students' fees, would enable the University to proceed at its present outlay of expense, and provide a moderate salary for a Chancellor—an officer indispensable to the success and efficient management of the institution.

MEETINGS OF THE BOARD.

Two sessions of the Board of Regents have been held during the year covered by this report.

At the first session, commencing on the 16th day of January, (and continuing for three days,) besides the transaction of ordinary business, the resignation of Chancellor Barnard, which had been tendered to the Board at their annual meeting in June, 1860, was formally accepted.

The following preamble and resolutions, reported by Regents McMynn, Hobart and Pickard, committee appointed for that purpose, were adopted as expressing the acceptance by the Board of the Chancellor's resignation, and the sentiments of the Board in respect thereto:

WHEREAS, Dr. Barnard, in July last, tendered to this Board his resignation as Chancellor of the University of Wisconsin, and, the Board, cherishing the hope that his health, after a few months of rest, might be so far restored, as to permit him to enter upon the duties of his office, declined to accept the same, and requested that it be withdrawn; and, whereas, it has been ascertained, that the state of his health is such as precludes the probability of his being able to resume his position as Chancellor; and, whereas, the interests of the University imperatively demand the presence of a presiding officer; therefore

Resolved, That while we feel it due to the interests intrusted to our care, to accede to Dr. Barnard's request, and to accept his resignation, we deeply regret the necessity that compels us to sever those relations from which we had anticipated the greatest benefits to the University, and to the other educational interests of our State.

Resolved, That we deeply sympathize with Chancellor Barnard in the disappointment consequent upon his inability from impaired health, to carry out those plans of usefulness to our State, which he so wisely laid, and which he labored so unselfishly to realize, and that we cherish a deep sense of the obligations under which he has placed us, by his devotion to the work in which he met with such distinguished success, during the time he was able to be among us.

At this session, Messrs. M. M. Davis, of Portage, J. G. McMynn, of Racine, O. M. Conover, of Madison, F. H. Head, of Kenosha, J. J. Guppy, of Portage, and Rev. Messrs. N. C. Chapin of La Crosse, and M. P. Kinney, of Janesville, were selected and requested to act as examining committee at the annual examination of the classes in the University.

At the second session of the Board, commencing June 25th last, and continuing for three days, Messrs. John W. Stewart, of Green; Theodore Prentiss, of Watertown; Michael Frank, of Kenosha, and Edward Salomon, of Milwaukee, appeared as members of the Board by election of the Legislature to fill vacancies occasioned by the expiration of the terms of Messrs. N. W. Dean, L. B. Vilas, S. L. Rose, and A. L. Castleman. Hon. L. B. Vilas also took his seat as a member of the Board, to fill the vacancy occasioned by the resignation of Hon. B. E. Hutchinson.

D. H. Tullis was elected Secretary, and Timothy Brown, Treasurer of the Board, each for the term of two years, from the 1st day of October, 1861. The salary of the Secretary was fixed at one hundred dollars per annum.

Messrs. Harvey, Conover, Pickard, Tenney and Vilas, were appointed Executive Committee of the Board.

Messrs. McMynn, Prentiss and Frank, were designated as the Library Committee.

On recommendation of the examining committee appointed by the Board at the January session, a change was adopted in the course of study prescribed to the college classes, by which one year's study of the French and German Languages and Literature was made an indispensable condition to conferring a degree at graduation.

A change of terms from two terms per annum to three, was, on recommendation of the Faculty, adopted, with corresponding changes of fees. For particular information of these changes, and of the courses of study, privileges and internal management of the University, reference is made to the Annual Catalogue, (document "E") hereto appended.

Respectfully submitted,
In behalf of the Board of Regents,
L. P. HARVEY,
M. M. DAVIS,
Committee.

"A."

INTERNAL CONDITION.

The educational influences of the University upon its students were never more powerful and salutary than during the last year. Never have the faculty met classes more tolerant of culture. The spirit of study has been so strong that cases of discipline have been few and slight. The "merit-roll" attests that absences have been rare, and the standard of attainment high. The zeal for knowledge has been but slightly checked even by the unprecedented and soul-stirring political agitations of the current season.

The Faculty are proud to record the following nineteen names of those under their instruction within the last University year, who have entered the armies of our country:

G. W. Ashmore,
J. H. Bull,
John Bull,
C. M. Campbell,
Edwin Coe,
J. Curtiss,
B. R. Ellis,
Robert H. Henry,
— Hungerford,
M. Leahy,
E. G. Miller,
— Noble,
— Zack.
P. Norcross,
O. — Remick,
— Rockwood,
H. D. Smith.
H. Vilas,
W. Wyse,

While the University has thus sent forth a score of recruits, the number of students within its gates during the last term has been ninety-seven; more than at any time for at least two years. Not only have many left the Institution to enlist, but more than one in the camp just west of it, has been heard to say that he was making arrangements to become a student there when interrupted by the war. On the whole, it may be safely said that, had peace continued, the University would now enroll a larger corps of students than at any previous period.

The preparatory school, which is the nursery of the higher departments, has been doubly efficient since its restoration within the walls of the University; but it can never do its perfect work without some increase of its instructional force; nor, in the judgment of the faculty, is any officer more needed than an additional tutor.

CALL FOR A MILITARY ELEMENT.

All parties will agree that the State University ought to be from time to time so modified as best to meet the varying exigencies of the commonwealth whose name it bears. Nor are Milton's words now less true than in the midst of that great English rebellion, when he declared that, "education, if complete and generous, must fit a man to perform, justly, skillfully, and magnanimously, all the offices of WAR no less than of peace." Indeed, no State has ever for a long period neglected military culture. It is well known that in continental Europe most able-bodied men are obliged to serve as soldiers; but how pervasive the military element is in transatlantic schools, is a fact less generally understood in America. Bishop Henni, of Milwaukee, educated at St. Gall, in a school not distinctively military, states that he was drilled for four years. Indeed, not only in Switzerland, but throughout Italy, Germany, as well as the royal and commercial colleges of France, every tourist notes that all signals are given by drum-beats, that the pupils dress in uniform, and spend from three to six hours a week in military exercises.

A similar element is now rapidly leavening English schools from highest to lowest. Aside from the importance of such an element as a training for war, the Vice Chancellor of Oxford has lately testified that the institution of the volunteer drill in that college, had been attended by an improvement of the mental labors, and of the whole order and discipline, as well as of the health of the University; and that, encouraged by these first fruits, he was about to make provisions for cavalry exercises. Testimonies might be multiplied, were it not needless, that besides their doubling physical vigor, military tactics inuring to habits of order, obedience, self-restraint, must be a help to educational discipline.

A military feature is not unknown in the schools of our own country. The fame of West Point is world-wide. When Captain Patridge retired from the superintendency of that school in 1817, he organized a Military Academy in Norwich, Vermont, which has been in operation ever since, and is now crowded. To the same officer, similar academies in Middletown, Connecticut, and in at least a dozen other places, owed their establishment. These academies initiated in military science a considerable portion of the officers who shared in the war with Mexico, and who now lead the armies of the Union. While several of these schools survive, like most educational establishments which are endowed neither by the State nor by any religious denomination, they have had but a languishing existence, though they are now waking to newness of life.

At the South they have ordered this matter otherwise. According to Col. Scott's Military Dictionary, "military academies modelled on West Point, have been long supported within the respective limits, by the States of Virginia, North Carolina, South Carolina, Alabama, Kentucky, and perhaps others." Nor is it improbable that these schools of the officer, have greatly controlled the fortunes of the last campain.

In view of facts like these, the Regents of Michigan University, on the 26th of June last, with entire unanimity, established a Military Chair, entitled the Professorship of Military Engineering and Tactics. They also contemplate a further development of their University in this direction, as soon as they can secure the co-operation of the State.

The students in the Wisconsin University near the beginning of the Autumn term, organized a military company among themselves. Through the kindness of General Utley, arms were granted them, one of the Professors becoming responsible for the safe return of the same. These University volunteers kept up their exercises, one hour each afternoon, till the last week in the term with unflagging spirit, and made such progress in the manuel and marching manoeuvres, that they would compare favorably with any company in Camp Randall. Much of their proficiency is no doubt due to their Captain, E. G. Miller, a volunteer in the first regiment who, after serving out his time on both sides of the Potamac, returned to the still air of delightful studies.

If any thing shall be done by our Legislature for military education, that element may be most economically engrafted upon some existing institution. Such a department befits the State University rather than any denominational college; and nowhere are the location, the grounds, and the buildings so favorable as at the University, for such an experiment.

"B"

REPORT OF THE EXAMINING COMMITTEE.

To the Board of Regents of the University of Wisconsin:

The undersigned, a committee appointd by your body to attend the annual examination of the University classes for the year 1861, would respectfully report

That the examination of the classes commenced on Wednesday the 19th inst., but through a misunderstanding as to the time, your committee did not arrive until the following day, and others failed to attend upon the examination of the classes in Political Economy, Moral Philosophy, Analytical Geometry and the Calculus: That they have attended the examination of nearly all the other classes; which examinations were conducted by the several professors, the committee proposing from time to time such questions as they deemed advisable.

1.—MODERN LANGUAGES.

The sudents in this department under the charge of Professor Fuchs, gave evidence of most thorough training in the elementary principles of the French and German languages. The instructor evidently deemed a thorough understanding of the principles of the grammar of these languages of more importance than an apparent glibness in translation, and by training his classes in pursuance of this idea, lays the foundation for a complete mastery of the difficulties of a language.

The committee were especially pleased with the almost uniformly correct pronunciation of the members of the French and German classes. Were they to make any suggestion in the premises, it would be that greater care be taken to translate the French and German authors into pure, idiomatic English. They observed, though rarely, a literal translation of an idiomatic French or German phrase, which, especially among the more advanced classes, should be carefully avoided. The translation of foreign authors is one of the most advantageous methods of forming a correct English style, if care be thus taken to free the ideas of such authors from all traces of their foreign dress.

The committee were, however, highly pleased with the progress of the classes in this department; a correct pronunciation being by far the most important and difficult portion of their labors.

Your committee are advised that the study of the French and German languages, by those students desiring a degree from the University, is elective. The exceeding richness of the French and German literature as well as the great practical value in our own State of a knowledge of those languages would seem to your committee to warrant the adoption of a rule making the study of those languages imperative: and they would beg leave to suggest to your honorable body the propriety of requiring at least one year's study of those languages as a prerequisite to the obtainment of a degree.

2.—MATHEMATICS.

The University rules require for admission to the Freshman Class a knowledge of Algebra and Geometry; which two studies usually occupy nearly the whole of the Freshman year, in other similar institutions.

Your committee deem this change a most desirable one, leaving as it does a large amount of time to be appropriated to other studies, and the principles of Algebra and Geometry being usually taught with thoroughness and acquired with facility in the preparatory schools. The classes in Trigonometry, Surveying and Navigation, the only classes in mathematics reviewed after the arrival of your committee, passed a highly creditable examination. The method of Professor Sterling, combining as it does the out-of-door, practical application of the principles of surveying and mensuration with the class-room recitations upon the same, is well calculated to relieve the study of mathematics from so much of its dryness as is not innate and inseparable from the subject itself. The young gentlemen of the class seemed thoroughly familiar with the principles of land surveying and their application, and with the use of the compass and theodolite.

There has been for several years past much enquiry for well trained civil engineers, and this demand must of necessity be greatly increased by the present military movements throughout the nation. Your committee were therefore especially pleased to observe that the thorough training in the University in the groundwork of the science of Engineering was in accordance with the demand of the times.

3.—NATURAL SCIENCES.

In this department your committee attended the examinations of the classes under the tuition of Prof. Carr, in Geology, Botany and Chemistry.

The method pursued by Professor Carr, in this department, was to your committee, somewhat novel, but impressed them as in the highest degree advantageous. The Professor is accustomed to lecture upon some branch of the special study before the class—the class taking in writing notes of his lecture. On the following day, having in the meantime been required to examine various authorities cited by the instructor bearing upon the subject discussed, certain members of the class, in turn, repeat the lecture of the previous day, or so much thereof as they can retain in memory, others criticise and supply any points omitted, &c.

The examinations of Prof. Carr were conducted in the same manner, each student being required to give a brief oral lecture upon a topic assigned him a few hours previous. By this method the student acquires at once a knowledge of the subject and facility and correctness in the imparting of such knowledge. The classes taught by Professor Carr, evinced a thorough theoretical and a good degree of practical knowledge of the subjects discussed.

The conveniences for the study of Chemistry are somewhat limited. There is but one small room for the apparatus, chemicals, etc., and this is much of the time necessarily occupied by Dr. Carr in his preparations for the various experiments performed before the class.

Your committee would suggest that inasmuch as a practical knowledge of Chemistry is indispensable in connection with a theoretical knowledge, some convenient room be set apart as a laboratory for the use of the students engaged in the study of chemistry, fitted up with a few tables, &c., and open at all times to such students for the purpose of practical experimenting. The expense would be but trifling and the advantages manifold. Some few additional books of reference upon the various natural sciences are also desirable.

4.—LNCIENT AANGUAGES.

In this department, with but few exceptions, the students showed a good degree of proficiency. Much care was evidently bestowed upon the elementary principles fo the Greek and Latin languages; the grammar was by the most advanced classes never outgrown. Your committee have rarely heard classes of young men subjected to such searching examinations as were the pupils of Professor Butler, where occurred so few errors of pronunciation, analysis and translation. Professor Butler is evidently an enthusiastic admirer of the ancient classics, and has succeeded in imparting to his classes the same spirit.

In the preparatory department, under the charge of Tutor Parkinson, so far as the examinations were heard by your committee, the students seemed to be progressing in a satisfactory and thorough manner.

As before stated, the regular classes in the special department of Professor Reed, were examined before the arrival of your committee.

During the whole exercises, your committee were favorably impressed with the evident fairness of the examinations, no attempts being made for undue display.

In conclusion, your committee would respectfully state that prior to their present visit they were wholly unacquainted with the University, its Professors, and the course of study therein pursued. They showed the prejudice common with Eastern men against Western colleges. But they are free to admit that their views have been entirely changed. In point of thorough elementary training and correct, mature scholarship, even now, the graduates of the University of Wisconsin, contending as the institution does, and as every new institution must, with numberless disadvantages, will compare favorably with the graduates of the older institutions of the Eastern States. And your committee do not doubt but that under the fostering care of your honorable body animated as it is by a firm determination that no steps shall be taken backward, and vigilant in all things to promote the highest interest of the institution and thereby of all the people of the State, the University of Wisconsin shall ultimately become to the State of Wisconsin what the University of Michigan is to that State—the chiefest glory of the Commonwealth.

F. H. HEAD,
J. J. GUPPY,
M. P. KINNEY,
Committee.

Dated, MADISON, 25th July, 1861.

"C."

SECRETARY'S REPORT.

MADISON, October 1, 1861.

To the Board of Regents of the Wisconsin University:

The Secretary of the Board of Regents respectfully reports that during the year ending on the 30th day of September, ultimo, warrants have been drawn upon the Treasurer of the Board as follows, to-wit:

1860.	To Whom Issued.	What For.	Amount.
Oct. 4	Mrs. Ford Ebal	Cleaning Halls, &c.	$9 87
Oct. 4	B. Goldenberger	Well buckets	1 50
Oct. 13	C. S. Mears & Co.	Lumber	42 71
Oct. 13	Simeon Dean, agent	Insurance premiums	300 00
Oct. 13	John Schneider	Labor	1 87
Oct. 20	James Flanagan	Labor, taking care of main edifice	95 00
Oct. 20	N. W. Dean, Treasurer	Interest paid State on loans from University Fund	240 43
Oct. 20	N. W. Dean, Treasurer	Interest on 10 per cent. construction warrants	338 31
Oct. 20	N. W. Dean, Treasurer	do do	504 14
Oct. 20	Wm. Westerman	Painting blackboards	5 00
Oct. 20	John Stamin	Carpenter work on main edifice	67 62
Oct. 31	A. Bruninghast	Labor	5 87
Nov. 1	Peter L. Newman	Labor on grounds	112 50
Nov. 12	James Campbell	Account of University Hall	160 00
Nov. 13	Paul Berg	Painting in University Hall	7 50
Nov. 13	Sharpe & Oakley	Building chimneys and repairing plastering	18 50
Nov. 15	Crosby, Nicholas & Co	Foreign Reviews	10 00
Nov. 15	R. K. Findlay	Paints, oil and glass	34 49
Nov. 15	R. F. Perry	Conductors and tin work	11 49
[illegible]	Boehmer	Blacksmithing	10 15

Nov. 15	*N. W. Dean*	Interest on 10 per cent. construction warrants	218 82
Nov. 15	*J. S. Webster*	Repairing vane on main edifice	10 00
Dec. 31	*Jas. D. Butler*	Salary	250 00
Dec. 31	J. P. Fuchs	do	200 00
Dec. 31	J. W. Sterling	do	250 00
Dec. 31	E. S. Crrr	do	250 00
Dec. 31	Daniel Read	do	250 00
Dec. 31	T. D. Coryell	do	150 00
Dec. 31	Wm. Hanagan	Services as Janitor	75 00
1861.			
Jan. 8	N. W. Dean, Treasurer	Interest on 10 per cent. construction warrants	200 00
Jan. 8	Calkins & Webb	Printing and Publishing	15 00
Jan. 8	T. D. Coryell	Repairing barometer	11 50
Jan. 8	Matthias Kline	Labor, repairing fence	8 00
Jan. 5	Goodrich & Johnson	Furnaces for University Hall	200 00
Jan. 5	James Campbell	Account of University Hall	78 62
Jan. 5	Goodrich & Johnson	Furnaces for University Hall	300 00
Jan. 5	Young America Cornet Band	Music at exhibition of Literary Societies	25 00
Jan. 5	C. S. Mears & Co	Lumber	49 22
Jan. 5	C. H. Luce	do	38 15
Jan. 5	Church & Hawley	Chairs for new lecture room	8 40
Jan. 5	Faculty of University	Advances for ringing bell and Smithsonian observations	32 00
Jan. 8	N. W. Dean, Treasurer	Interest on University Fund loan	172 60
Jan. 5	Abbott, Gregory, Pinny & Flower	Legal services	25 00
Jan. 11	Daniel Read	Proportion of tuition fees	145 95
Jan. 11	J. P. Fuchs	do do	145 95
Jan. 11	E. S. Carr	do do	145 95
Jan. 11	J. W. Sterling	do do	145 95
Jan. 11	J. D. Butler	do do	145 95
Jan. 19	H. C. Hobert	Milage and per diem as Regent	22 50
Jan. 19	John G. McMinn	do do	20 00
Jan. 19	Carl Schurz	do do	15 00
Jan. 19	M. M. Davis	do do	11 50
Jan. 20	First Baptist Society	Use of church for exhibition of Literary Societies	6 00

"C"—*Secretary's Report*—continued.

1861.	To Whom Issued.	What For.	Amount.
Jan. 25	J. D. Ruggles, Secretary	Salary from July 1st, 1860, to June 1st 1861	$125 00
Jan. 31	Peter L. Neuman	Carpenter work and Superintending grounds	112 50
Feb. 25	A. B. Brooks	Wood	680 50
Feb. 25	A. E. Brooks	Hauling wood	1 50
Feb. 25	Simeon Mills	Hardware	138 13
Feb. 25	Mosely and Brother	Window shades	6 70
Feb. 25	T. N. Bovee	Repairing locks and keys	3 00
Feb. 25	Theological and Literary Journal	Subscription delivered to Porf. Sterling	6 00
Feb. 25	Patrick Daisey	Cleaning well	6 00
March 4	Joseph Chatterson	Superintending University Hall, and costs in suit	128 02
March 4	Joseph Chatterson	do do	100 00
March 4	Joseph Chatterson	do do	100 00
March 4	Joseph Chatterson	do do Bal. due	232 00
March 30	Daniel Read	Salary	250 00
March 30	E. S. Carr	do	250 00
March 30	J. W. Sterling	do	250 00
March 30	J. D. Butler	do	250 00
March 30	J. P. Fuchs	do	200 00
March 30	J. D. Ruggles	Salary as Secretary	62 50
March 30	Wm. Flanagna	Services as Janitor	75 00
April 1	J. B. Parkinson	Salary	125 00
May 1	Peter L. Neuman	Services as superintendent and carpenter	112 50
June 1	N. W. Dean, Treasurer	Interest paid on loans to University	4,850 96
June 1	N. W. Dean, Treasurer	Interest paid on ten per cent. construction warrants	78 82
June 1	R. K. Findlay	Merchandise	85 16
June 1	George Paine	do	95 60
June 1	J. B. Bowen	do	81 90

June 1	P. L. Carman	Coal and cartage	48 00
June 1	*J. W. Sterling*	Sundry advances	27 90
June 1	*University Faculty*	Tuition; dues to Mr. Ball	41 50
June 1	P. L. Newman	Work with team on ground	6 57
June 18	J. D. Ruggles	Salary as Secretary	58 34
June 25	J. B. Parkinson	Salary	125 00
June 27	Michael Frank	Mileage and per diem as Regent	21 00
June 27	J. W. Stewart	do do	15 90
June 27	Theodore Prentiss	do do	12 50
June 27	M. M. Davis	do do	20 50
June 27	E. Salomon	do do	17 50
June 27	J. G. McMynn	do do	20 00
June 27	F. H. Head	Mileage as examiner	18 50
June 27	J. J. Guppy	do do	18 00
June 28	Daniel Read	Salary	250 00
June 29	J. P. Fuchs	do	200 00
July 1	E. S. Carr	do	250 00
July 1	James D. Butler	do	250 00
July 6	J. W. Sterling	do	250 00
July 22	Cornet Band	Music at commencement	28 00
July 24	C. S. Mears & Co	Lumber	44 82
July 24	Peter L. Neuman	Labor as carpanter	26 50
July 26	W. Griffith	Work on blackboards	10 00
July 26	E. S. Carr	Chemicals	18 85
July 30	W. H. Wyman, agent	Insurance premiums	225 00
Aug. 1	E. A. Calkins & Co.	Printing circulars	7 00
Aug. 1	Smith & Cullaton	Printing orders of exercise at commencement	5 00
Aug. 6	J. P. Fuchs	Salary	66 66
Aug. 7	F. B. Perry	Roofing tin, soder, ~~and~~ draying	27 75
Aug. 8	J. W. Sterling	Sundry bills paid by him	20 69
Aug. 8	Silliman & Dana	Silliman's Journal	10 00
Aug. 22	Dunning, Jones & Co.	Merchandise	34 42
Aug. 22	W. H. Wyman, agent	Insurance Premiums	150 00
Aug. 27	C. W. Heyl	Labor on roof of Univesity Hall	157 53

"C."—*Secretary's Report*—continued.

1861.	To Whom Issued.	What For.	Amount.
Sept. 19	Daniel Rood	Proportion of tuition fees	$163 74
Sept. 20	J. W. Sterling	do do	163 74
Sept. 21	J. W. Sterling	Advances for incidental expenses	50 00
Sept. 28	James D. Butler	Proportion of tuition fees	163 74
Sept. 28	E. S. Carr	do do	163 74
Sept. 28	J. P. Fuchs	do do	163 74
Sept. 30	James Campbell	Balance for erecting University Hall	276 51
Sept. 30	James D. Butler	Salary	250 00
Sept. 30	E. S. Carr	do	250 00
Sept. 30	Daniel Reed	do	250 00
Sept. 30	D. H. Tullis	Salary as Secretary	25 00
Sept. 30	J. W. Sterling	Salary	250 00
Sept. 30	J. P. Fuchs	do	183 34
Sept. 30	N. W. Dean, Treasurer	Interest on 10 per cent. construction warrants	198 37
Sept. 30	N. W. Dean, Treasurer	do do do	380 00
Sept. 30	N. W. Dean, Treasurer	do do do	347 50
			$19,186·08

"C"—*Secretary's Report*—continued.

The foregoing list of warrants issued during the last fiscal year, may be appropriately classified and charged to the following sources, to wit:

Salaries of Professors	$6,748 45
Salary of Secretary	270 84
Salary of Janitor	150 00
Salary of Carpenter and Superintendent of grounds	364 00
Contingent expenses and repairs	825 06
Labor on grounds	11 44
Insurance	675 00
Interest	7,028 94
Main edifice	1,884 42
Furniture for Main edifice	108 08
Library	42 00
Printing	27 00
Litigation	25 00
Mileage and per diem of Regents	176 40
Mileage of examiners	26 50
Fuel	730 00
Apparatus	58 00
	$19,186 08

D. H. TULLIS,
Secretary Board of Regents.

January 2, 1061.

"D."

To the Board of Regents of the University of Wisconsin:

The Treasurer of the University respectfully submits his annual report, containing a detailed statement of the receipts and disbursements of his office during the fiscal year commencing on the 1st day of October, A. D. 1860, and closing on the 30th ultimo; from which it will appear that the receipts for the year amount to the sum of $25,607 10, and the disbursements for the same time to the sum of $23,879 85, leaving in the treasury a balance of $1,727 25, subject to be paid to his successor in office.

N. W. DEAN,
Treasurer of the University.

MADISON, October 1st, 1861.

REPORT of Receipts and Disbursements by the Treasurer of the University, from the 1*st day of October, A. D.* 1860, *to the* 30*th day of Sept., A. D.* 1861, *inclusive.*

RECEIPTS.

Date.	From what Source.		Amount.	Total.
1860.				
Oct. 1......	Balance of Cash on hand as per last report..........		$840 92	
Oct. 18......	Received from building fund..........		1,800 00	
Dec. 18......	do	income fund..........	500 00	
Dec. 31......	do	income fund..........	200 00	
1861.				
Jan. 5......	do	fees from students......	689 39	
Jan. 11......	do	fees from students......	8 00	
Jan. 12......	do	building fund..........	2,500 00	
Jan. 29......	do	building fund..........	2,000 00	
Feb. 5......	do	wood—Prof. J. D. Butler	28 38	
Feb. 18......	do	income fund..........	2,500 00	
April 10......	do	income fund..........	3,000 00	
May 31......	do	income fund..........	4,221 70	
July 9......	do	fees from students......	818 71	
July 17......	do	income fund..........	3,000 00	
Sept. 17......	do	income fund..........	3,500 00	$25,

"D"—continued.

DISBURSEMENTS.

Date of Payment.	No. of War't	To whom Paid.	Amount.
1860.			
Oct. 1......	1036	Wakeley and Tenney, building..................	5 00
Oct. 1......	1056	J. W. Sterling, salary..............................	150 00
Oct. 5......	1060	Mrs. Ford, et. al., diary............................	9 37
Oct. 5......	1061	B. Goldenberger, buckets........................	1 50
Oct. 15......	1062	C. S. Mears & Co., lumber........................	42 71
Oct. 15......	1063	Simeon Dean, agent insurance..................	300 00
Oct. 15......	1064	Jacob Schnieder, labor............................	1 87
Oct. 21......	1065	James Flannegan, labor...........................	95 00
Oct. 21......	1066	N. W. Dean, Treasurer, } State—on account	240 48
Oct. 21......	1067	do do } of interest paid	333 30
Oct. 21......	1068	do do } upon warrants.	504 14
Oct. 21......	1069	Wm. Westerman, painting black boards......	5 00
Oct. 21......	1070	John Shahner, carpenter work..................	67 62
Nov. 1......	1071	August Bunninghaus, labor.......................	5 31
Nov. 2......	1072	Peter L. Neuman, salary as Sup't...............	112 50
Nov. 13......	1073	James Campbell, contract main building.. .	160 00
Nov. 14......	1074	Paul Berg, painting....................................	7 50
Nov. 14......	1075	Sharpe & Oakley, repairs..........................	18 50
Nov. 16......	1077	R. K. Findlay, paints and oils.....................	34 49
Nov. 16......	1078	B. F. Perry, conductors, &c........................	11 49
Nov. 16......	1079	Mathew Bockner, black smith....................	10 15
Nov. 16......	1080	N. W. Dean, Treasurer, int. upon warrants.	218 82
Nov. 16......	1081	J. S. Webster, repairs main edifice............	10 00
1861.			
Jan. 8......	1082	J. D. Butler, salary....................................	250 00
Jan. 3......	1083	J. D. Fuchs, do	200 00
Jan. 3......	1084	J. W. Sterling, do	250 00
Jan. 3......	1085	E. S. Carr, do	250 00
Jan. 8......	1086	Daniel Read, do	250 00
Jan. 3......	1087	T. D. Coryell, do	150 00
Jan. 3......	1088	William Flannegan, janitor.......................	75 00
Jan. 3......	1089	N. W. Dean, Treas., interest upon warrants	200 00
Jan. 3......	1090	Calkins & Webb, printing...........................	15 00
Jan. 3......	1091	T. D. Coryell, repairing apparatus.............	11 50
Jan. 3......	1092	Mathias Kline, repairing fence..................	3 00
Jan. 5......	1093	Goodrich & Johnson, furnace....................	200 00
Jan. 5......	1094	James Campbell, contract main edifice.......	78 62
Jan. 5......	1096	Music, for exhibition..........	25 00
Jan. 5......	1097	C. S. Mears & Co., lumber.........................	49 22
Jan. 5......	1098	C. H. Luce, lumber....................................	33 15
Jan. 5......	1099	Church & Hawley, chairs...........................	8 40
1860.			
Nov. 9......	267	James Campbell...	122 12
Dec. 4......	50	do	122 50
Dec. 27......	268	do	110 75
1861.			
Jan. 7......	1100	Faculty of University, ringing bell............	32 00
Jan. 7......	1101	N. W. Dean, Treas., interest upon warrants..	172 60
Jan. 7......	1102	Abbott, Gregory, Pinney, and Flowers, legal	25 00
Jan. 11......	1103	Daniel Read, fees......................................	145 95
Jan. 11......	1104	J. P. Fuchs, do	145 95

"D"—continued.

DISBURSEMENTS.

Date of Payment.	No. of War't	To whom Paid.	Amount.
1861.			
Jan. 11......	1105	E. S. Carr, fees......	145 95
Jan. 12......	1106	J. W. Sterling, do	145 95
Jan. 12......	1107	J. D. Butler, do	145 95
Jan. 19......	1108	H. O. Hobart, do	22 50
Jan. 19......	1109	J. G. McMynn, do	20 00
Jan. 19......	1110	Carl Schurz, do	15 00
Jan. 20......	1111	M. M. Davis, do	11 50
Jan. 19......	1112	First Baptist Society, exhibition......	6 00
Jan. 22......	124	James Campbell......	105 58
Jan. 22......	90	do	105 58
Jan. 22......	125	do	105 58
Jan. 22......	96	do	105 58
Jan. 22......	77	do	105 58
Jan. 22......	76	do	105 58
Jan. 22......	97	do	105 58
Jan. 22......	94	do	105 58
Jan. 22......	82	do	105 58
Jan. 22......	79	do	105 58
Jan. 25......	1113	J. D. Ruggles, Sec'y salary......	125 00
Jan. 31......	1114	Peter L. Neuman, salary......	112 50
Feb. 1......	108	James Campbell......	102 50
Feb. 1......	78	do	105 58
Feb. 1......	240	Goodrich & Johnson......	111 66
Feb. 1......	284	James Campbell......	111 66
Feb. 1......	296	do	110 00
Feb. 1......	295	do	110 00
Feb. 25......	1115	Abel E. Brooks, wood......	680 50
Feb. 28......	1116	do do	1 50
Feb. 28......	1117	Simeon Mills, hardware......	138 13
Mar. 1......	1118	Moseley & Brother, window shades......	6 70
Mar. 1......	1119	T. N. Bovee, repairing locks......	3 00
Mar. 2......	1120	Theological and Library Journal, library...	6 00
Mar. 2......	1121	Patrick Daisey, cleaning well......	6 00
Mar. 4......	1122	Joseph Chatterson, Sup't and costs......	128 02
Mar. 4......	1123	do do	100 00
Mar 5......	1124	do do	100 00
Mar. 30......	1126	Daniel Read, salary......	250 00
Apr. 1......	89	James Campbell......	125 88
Apr. 1......	171	do	107 50
Apr. 1......	1127	E. S. Carr, salary......	250 00
Apr. 2......	1128	John W. Sterling, salary......	250 00
Apr. 2......	293	Joseph Chatterson......	110 80
Apr. 2......	1129	James D. Butler, salary......	250 00
Apr. 3......	1130	J. P. Fuchs......	200 00
Apr. 4......	1131	J. D. Ruggles......	62 50
Apr. 4......	1132	William Flannegan......	75 00
Apr. 4......	1133	J. B. Parkinson......	125 00
Apr. 19......	297	James Campbell......	111 25
Apr. 19......	298	do	40 89
Apr. 19......	252	do	113 75
Apr. 19......	110	do	124 58

"D"—continued.

DISBURSEMENTS.

Date of Payment.	No. of War't	To whom Paid.	Amount.
1861.			
Apr. 19......	246	James Campbell....................................	116 25
Apr. 19......	255	do	113 75
May 1......	1134	P. L. Neuman..	112 50
May 3......	192	James Campbell....................................	120 00
June 1......	1135	N. W. Dean, Treasurer, interest upon loans	4,350 96
June 1......	1136	do do do do	78 32
June 3......	1137	R. K. Findlay..	35 16
June 3......	1138	George Paine........................	95 60
June 3......	1139	J. B. Bowen..	81 90
June 3......	1140	P. L. Carman & Co..................................	48 00
June 3......	1141	J. W. Sterling..	27 90
June 5......	1142	Faculty of University............................	41 50
June 5......	1143	P. L. Neuman..	6 57
June 18......	1144	J. D. Ruggles..	58 34
June 25......	1145	J. B. Parkinson......................................	125 00
June 27......	1146	Michael Frank..	21 00
June 28......	1147	J. W. Stewart..	15 90
June 28......	1148	Theodore Prentiss..................................	12 50
June 28......	1149	M. M. Davis..	20 50
June 29......	1150	Edward Saloman....................................	17 50
June 29......	1151	J. G. McMynn..	20 00
June 29......	1152	F. H. Head..	13 50
June 29......	1153	J. J. Guppy..	13 00
June 29......	1154	Daniel Read..	250 00
July 1......	1155	J. P. Fuchs..	200 00
July 1......	1156	E. S. Carr..	250 00
July 2......	1157	James D. Butler....................................	250 00
July 6......	1158	J. W. Sterling..	250 00
July 19......	177	James Campbell....................................	107 23
July 19......	178	do	107 23
July 19......	179	do	107 23
July 19......	254	do	116 39
July 22......	1159	Wm. E. Spencer........................	28 00
July 24......	1160	C. S. Mears & Co..................................	44 32
July 25......	1161	Peter L. Neuman....................................	26 50
July 26......	1162	Wm. Griffith..	10 00
July 27......	1163	E. S. Carr..	13 85
July 30......	1164	Wm. H. Wyman, Ætna Ins. Agent............	225 00
Aug. 1......	1165	E. A. Calkins & Co..................................	7 00
Aug. 2......	1166	Smith & Cullaton....................................	5 00
Aug. 6......	1167	J. P. Fuchs..	66 66
Aug. 7......	1168	B. F. Perry..	27 75
Aug. 8......	1169	J. W. Sterling..	20 69
Aug. 19......	299	Queen and Mathias	113 33
Aug. 22......	1171	Dunning, Jones & Co.	34 42
Aug. 23......	1172	Wm. H. Wyman, Ætna Ins. Agent............	150 00
Aug. 27......	1173	C. W. Heyl..	157 53
Aug. 31......	1	James Campbell....................................	130 83
Aug. 31......	2	do	130 83
Aug. 31......	3	do	130 83
Sept. 19......	1174	Daniel Reed..	163 74

"D"—continued.

DISBURSEMENTS.

Date of Payment.	No. of War't	To whom Paid.	Amount.
1861.			
Sept. 21......	1175	J. W. Sterling..	163 74
Sept. 23......	1176	do	50 00
Sept. 27......	1095	Goodrich & Johnson..............................	321 88
Sept. 28......	1177	James D. Butler....................................	163 74
Sept. 28......	1178	E. S. Carr.	163 74
Sept. 28......	1179	J. P. Fuchs..	163 74
Sept. 30......	1180	James Campbell.....................................	276 51
Sept. 30......	1181	James D. Butler.....................................	250 00
Sept. 30......	1182	E. S. Carr...	250 00
Sept. 30......	1183	Daniel Reed..	250 00
Sept. 30......	1184	D. H. Tullis...	25 00
Sept. 30......	1185	J. W. Sterling..	250 00
Sept. 30......	1186	J. P. Fuchs..	183 84
Sept. 30......	1187	N. W. Dean, Treas., interest upon warrants.	198 37
Sept. 30......	1188	do do do do	380 00
Sept. 30......	1189	do do do do	347 50
Sept. 30......	83	James Campbell......................................	102 00
Sept. 30......	84	do	102 00
Sept. 30......	87	do	102 00
Sept. 30......	88	do	85 40
Sept. 30......	91	do	102 00
Sept. 30......	169	do	110 00
Sept. 30......	957	Silliman & Dana.....................................	5 00
Sept. 30......	1170	do do	10 00
Sept. 30......	1076	Crosby, Nichols, Lee & Co..........................	10 00
			$23,879 85
Sept. 30......	....	Balance in Treasury..................................	1,727 25
Total		....	$25,607 10

The foregoing receipts and disbursements may be properly classified in the following order:

RECEIPTS.

Balance in Treasury	$840 92	
Rec'd from principal or building fund	6,300 00	
do income fund	16,921 70	
do students' fees	1,516 10	
do incidentals	28 38	
		$25,607 10

DISBURSEMENTS.

Incidentals	$1,015 00	
Insurance	675 00	
Interest	7,023 91	
Wood	730 00	
Mileage and per diem of Regents	202 90	
Salary and fees of officers	7,575 79	
Buildings	606 35	
Indebtedness	6,050 90	
Balance in Treasury, 30th Sept., 1861	1'727 25	
		$25,607 10

REPORT OF THE AUDITING COMMITTEE.

MADISON, September 30, 1861.

We have this day examined the books and vouchers of N. W. Dean, Esq., Treasurer of the University of Wisconsin, and compared them with the books, accounts and warrants of the Secretary of the Board for the fiscal year ending September 30th, 1861, and find that there is a balance belonging to the University of Wisconsin of *one thousand seven hundred and twenty-seven dollars and twenty-five cents*, as shown above, (1,727 25.)

LOUIS P. HARVEY, Ch'n *pro tem.* of Ex. Committee,
D. H. TULLIS, Secretary,
} *Auditing Committee of University of Wisconsin.*

"E."

CATALOGUE

OF THE

OFFICERS AND STUDENTS

OF THE

WISCONSIN STATE UNIVERSITY,

FOR THE

Year Closing June 26, 1861.

BOARD OF REGENTS.

L. P. HARVEY, Secretary of State, *ex-officio*,		Madison.
J. L. PICKARD, Supt. of Public Inst. *ex-officio*,		Madison.
JOHN G. McMYNN, Term expires	1863,	Racine.
CARL SCHURZ,	" "	Milwaukee.
HORACE A. TENNEY,	" "	Madison.
LEVI B. VILAS,	" "	Madison.
O. M. CONOVER,	" 1865	Madison.
MOSES M. DAVIS,	" "	Portage.
NELSON DEWEY,	" "	Cassville.
HARRISON C. HOBART,	" "	Chilton.
M. FRANK,	" 1867	Kenosha.
JOHN W. STEWART,	" "	Monroe.
THEODORE PRENTISS,	" "	Watertown.
EDWARD SALOMON,	" "	Milwaukee.
D. H. TULLIS, *Secretary*,		Madison.
TIMOTHY BROWN, *Treasurer*,		Madison.

FACULTY.

JOHN W. STERLING, A. M.,
Dean of the Faculty, and Professor of Mathematics and Natural Philisophy.

DANIEL READ, LL. D.,
Professor of Mental, Ethical and Political Science, Rhetoric and English Literature.

EZRA S. CARR, M. D.,
Professor of Chemistry and Natural History.

JAMES D. BUTLER, A. M.,
Professor of Ancient Languages and Literature.

JOHN P. FUCHS, M. D.,
Professor of Modern Languages and Literature.

J. D. PARKINSON, A. B., Tutor.

DAVID H. TULLIS,
Instructor in Commercial Calculations and Book-keeping.

GRADUATES OF THE UNIVERSITY.

NAME.	RESIDENCE.
JULY, 1854.	
Levi Booth, A. M.	Pike's Peak.
Charles T. Wakeley, A. M.	Madison.
JULY, 1856.	
Samuel S. Benedict. A. M.	
James M. Flower, A. M.	Madison.
Sidney Foote, A. M.	"
Burgess C. Slaughter, A. M.	Middleton.
JULY, 1857.	
Sinclaire W. Botkin, A. M.	Madison.
Thomas D. Coryell, A. M.	"
Charles Fairchild, A. M.	"
William G. Jenckes, A. M.	Terre Haute, Ind
John F. Smith, A. M.	Cincinnati.
JULY, 1858.	
Richard W. Hubbell, A. M.	Milwaukee.
John W. Slaughter, A. B.	Culpepper, Va.
William F. Vilas, A. M.	Madison.
JULY, 1859.	
Alexander C. Botkin, A. B.	Madison.
Hill C. Bradford, P. B.	Virginia.
Leonard S. Clark, A. B.	California.
Samuel Fallows, A. B.	Galesville.
Edward B. Guild, A. B.	Kansas.
Elbert O. Hand, A. B.	Elk Grove.
Edwin Marsh, A. B.	Beaver Dam.
Philip C. Slaughter, P. B.	Virginia.
JUNE, 1860.	
George W. Bird, A. B.	Madison.
Leander M. Comins, A. B.	Maine.
Thomas J. Hale, A. B.	Madison.
John B. Parkinson, A. B.	Fayette.
William P. Powers, A. B.	Madison.
Milan W. Serl, P. B.	Arkansas.
Fred. T. Starkweather, A. B.	Milwaukee.
John E. Sutton, A. B.	Madison.

JUNE, 1861.

Farlin Q. Ball, P. B.	Monroe.
James B. Britton, A. B.	Madison.
William W. Church, A. B.	“
Almerin Gillett, P. B.	Geneva.
S. Azariah Hall, A. B.	Eau Claire.
Michael Leahey, P. B.	Portland.
John D. Parkinson, A. B.	Madison.
William E. Spencer, A. B.	“
Henry Vilas, A. B.	“

UNDERGRADUATES.

NOTE.—C, Classical; S, Scientific; P, Preparatory.

Fourth Year.

NAMES.		RESIDENCE.
Farlin Q. Ball,	S	Monroe.
James B. Britton,	C	Madison.
William W. Church,	C	"
Almerin Gillett,	S	Geneva.
S. A. Hall,	C	Hanchetville.
Michael Leahey,	S	Portland.
J. D. Parkison,	C	Georgetown.
William E. Spencer,	C	Madison.
Henry Vilas—9	C	"

Third Year.

Gideon W. Allen,	S	Trempealeau.
George W. Ashmore,	S	Arena.
Cary M. Campbell,	S	Madison.
Edwin D. Coe,	C	Watertown.
E. C. Hungerford,	S	"
Jefferson C. McKinney,	S	North Leeds.
Otis Remick,	S	Cornish, Me.
Isaac N. Stewart,—8	S	Waukesha.

Second Year.

J. Stannard Baker,	S	Hudson.
Paul Broder,	C	Madison.
Geo. F. Clark,	S	Lamartine.
Phineas J. Clawson,	C	Waukesha.
Milton S. Griswold,	C	"
Geo. M. Leland,	C	Ottawa, Ill.
S. S. Rockwood,	C	Milton.
Almon Smith,	S	Monroe.
J. Dwight Tredway,	C	Madison.
Levi M. Vilas,	C	"
Frank Waterman,—11	S	"

First Year.

Samuel H. Alexander,	C	Oswego, N. Y.
Ethelbert Askew,	S	Madison.
Oscar F. Black,	S	Sextonville.

Nathaniel Blanchard,	S	Watertown.
Moses L. Bradley,	C	Madison.
James Bull,	C	Middleton.
William Campton,	C	Mineral Point.
Geo. W. Carter	S	Fair Water.
Pitt Cravath	S	Whitewater.
Charles S. Curtis,	S	Rocky Run.
E. B. Delamatyr,	S	Middleton.
J. B. Everett,	S	Stone Mills, N. Y.
Brasier R. Ellis,	S	Westport.
William Fallows,	C	Hanchettville.
William Fuller,	S	Union Grove.
John E. Goldsworthy,	S	Union Grove.
Henry L. Gray,	C	Madison.
Ambrose A. Grout,	S	Fountain Prairie.
A. B. Griswold,	S	Watertown.
James L. Heigh,	C	Black Earth.
C. Frank Holt,	S	Kenosha.
Jay Jennings,	C	Caledonia.
William H. Keepers,	S	Madison.
John Leahey,	S	Portland.
Sherman Leland,	C	Ottawa, Ill.
Benedict S. Lewis,	C	Lodi,
James O. Lyman,	S	Hartford.
J. Eugene Mathewson,	S	Neosho.
William W. Mattison,	S	Hartford.
A. H. McCracken,	C	Monroe.
Edward G. Miller,	C	Sweet Home.
John Muir,*	S	Midland.
Pliny Norcross,	C	La Grange.
William L. O'Connor,	S	Ripon.
Milton S. Piper,	S	Madison.
Henry Reed,	S	Union Grove.
Jotham Scudder,	C	Juda.
W. C. Silverthorn,	C	Oakland.
Henry Smith,	C	Middleton.
J. C. Spooner,	C	Madison.
James W. Stillman,	S	Westerly, R. I.
Emory F. Stone,	S	Fort Atkinson.
Thomas Van Matre	C	Mineral Point.
Charles F. Vibahn,	S	Lemonweir.
W. Irving Wallace,	C	Baraboo.
William A. Watson,	C	Fulton.
S. H. Watson,	S	"
I. F. Winnek,	S	Lake Mills.
F. Whittier,—49	S	Markesan.

PREPARATORY.

NAMES.	RESIDENCE.	NAMES.	RESIDENCE.
John S. Abbott,	Madison.	Eugene A. Jones,	Madison,
W. I. Askew,	Madison.	John M. Jones,	Ballston, N.Y.
Charles Birge,	Whitewater.	Clarence Kellogg,	Madison,
Wm. A. Booth,	Madison.	C. P. Larkin,	Milwaukee,
Wilmot Booth,	Madison.	Geo. S. Marsh,	Whitewater,
C. E. Bristol,	Fond du Lac.	B. F. McCormack,	Burke,
John A. Bull,	Middleton.	M. McMurran,	Burke,
Byron S. Bush,	Madison.	Geo. H. Miller,	Fitchburg,
J. D. Butler,	Madison.	Wm. Noble,	Mineral Point,
Ezra S. Carr,	Madison.	J. N. O'Brien,	Cascade,
W. E. Carlin,	Carrollton, Ind.	Torge J. Oleson,	New Lisbon,
Chas. L. Catlin,	Hudson.	A. J. Rockwell,	Oconomowoc,
John Crowley,	Watertown.	Orsan E. Rice,	Oregon,
Thos. D. Fisher,	Mondovi.	A. H. Salisbury,	Oregon,
Lewis Frost,	Madison.	A. Starkweather,	Columbus,
Geo. G. Green,	Milford.	A. E. Valentine,	Ripon,
J. G Hall,	Monroe.	Charles Vilas,	Madison,
J. Heathcock,	Linden.	Wm. F. Welling,	Black Earth,
A. J. Howery,	Cross Plains.	J. C. Welling,	Black Earth,
J. K. Hyer,	Madison.	Chas. H. Wildish,	Waukesha.
Oran Ingman,	Newark, Ohio.	Wm. A. Wyse,—42	Sauk City.

COMMERCIAL CLASS.

NAME.	RESIDENCE.	
Wm. H. Askew,	Madison,	Wisconsin.
W. I. Askew,	"	"
Wm. P. Atwell,	"	"
Benj. D. Atwell,	"	"
E. P. Brooks,	"	"
F. B. Bryant,	"	"
Wilmot Booth,	"	"
Wm. A. Booth,	"	"
Norman C. Butler,	"	"
Henry Bean,	Plover,	"
Levi Bresce,	Madison,	"
James B. Berg,	Watertown,	"
Frank E. Corbett,	Corbetsville,	New York.
C. P. Chapman,	Madison,	Wisconsin.
Chas. O. Collins,	"	"
H. J. Cowles,	"	"
W. E. Carlin,	Carrolton,	Indiana.
J. W. Curtis,	Madison,	Wisconsin.
Riley Draper,	Markle,	Indiana.
A .A. Dutcher,	Madison,	Wisconsin.
M. C. Dunkleburg,	Pekin,	Illinois.
Wm. Filkins,	Madison,	Wisconsin.
Almerin Gillett,	Springfield,	"
Henry L. Gray,	Madison,	"
Timothy Grady,	"	"
A. C. Jackson,	"	"
Wm. Jarvis,	"	"
C. Judkins,	"	"
Godfrey Krebs,	"	"
A. J. Krum,	"	"
Adolph Krebs,	"	"
Frederick La Roque,	"	"
John Low,	Lowville,	"
A. Menges,	Madison,	"
W. P. McConnel,	"	"
Arthur Mills,	"	"
James McConnel,	"	"
J. T. McClure,	Prairie du Chien,	"
Geo. W. Moss,	Pierceville,	"

A. L. Mortimer,	Madison,	“
John McNaughton,	“	“
Charles Miller,	“	“
Edward Noyes,	“	“
John Nickolds,	“	“
James Nickolds,	“	“
Otho H. Orton,	“	“
Warham Parks,	“	“
John Reynolds,	“	“
H. M. Robinson,	“	“
John Sumner,	“	“
Lucius Strolp,	“	“
J. F. Spencer,	“	“
R. H. Spencer,	“	“
Geo. W. Smith,	“	“
Geo. W. Stoner,	“	“
John Stock,	“	“
Isaac Snyder,	Markle,	Indiana.
Wm. E. Spencer,	Madison,	Wisconsin.
J. W. Staples,	“	“
Stephen C. Thomas,	Mineral Point,	“
Geo. H. Ufford,	Madison,	Wisconsin.
Edward Voigt,	“	“
J. J. Vankulen,	“	“
H. Vandervort,	Cottage Grove,	“
William Welling,	Black Earth,	“
Edwin T. Williams,	Madison,	“
A. J. Whittier,	Markesan,	“
Fred. Wallen,	Madison,	“

SUMMARY.

Classical	34
Scientific	43
Preparatory	42
Commercial	68
	187
Twice counted	7
Total	180

SUBJECTS OF INSTRUCTION.

CLASSICAL COURSE.

FIRST YEAR.

FIRST TERM.—*Mathematics*—Algebra, Loomis'.
Latin—Livy, Lincoln's.
Greek –Xenophon's Anabasis.
History—United States.

SECOND TERM.—*Mathematics*—Algebra completed—Solid and Spherical Geometry, Loomis'; Plane Trigonometry.
Latin—Livy continued.
Greek—Xenophon's Memorabilia.
History—General.

THIRD TERM.—*Mathematics*—Mensuration, Surveying, Navigation, use of Instruments, Spherical Trigonometry.
Latin—The Odes of Horace.
Greek—Xenophon's Memorabilia continued.
English Language—

SECOND YEAR.

FIRST TERM.—*Mathematics*—Analytical Geometry, Smith's.
Latin—Horace—Satires.
Greek—Homer—Iliad, Owen's.
French—Fasquelle's Course.

SECOND TERM.—*Mathematics*—Differential and Integral Calculus, Smith's.
Latin—Horace—Epistles.
Greek—Homer or Æschylus, Prometheus.
French—Robertson's Method.

THIRD TERM.—*Mathematics*—Applications of the Calculus.
Natural Philosophy—Somatology, Lectures; Mechanics, Snell's Olmsted.
Latin—Horace finished.
Greek—Homer or Sophocles.
French—Reading from Chapsal's Leçons et Models de Literature.

THIRD YEAR.

FIRST TERM.—*Natural Philosophy*—Mechanics, Hydrostatics, Preumatics, &c., Snell's Olmstead.
Latin—Tacitus—Germania and Agricola.
Greek—Demosthenes—DeCorona, or Thucydides.
Rhetoric—
English Literature—
SECOND TERM.—*Natural Philosophy* completed.
Astronomy—Olmsted, Snell's.
Latin—Tacitus or Juvenal.
Greek—Demosthenes, Thucydidoes, or the Clouds of Aristophanes.
Mental Philosophy—Intellectual Powers.
THIRD TERM.—*Astronomy.*—Snell's Olmsted, Loomis'.
Latin—Juvenal and Persius.
Greek—Æscylus.
Mental Philosophy—Active Powers.
Logic—

FOURTH YEAR.

FIRST TERM.—*Ethics*—Haven.
Christian Evidences—Lectures.
International Law—Kent.
History of Philosophy—Lectures.
Chemical Philosophy—Lectures.
German—Ahn's Method.
SECOND TERM.—*Civil Polity*—
Constitutional Law—
Chemistry—The Metals—Organic Lectures.
German—Tiark's Grammar, Translations from English into German.
THIRD TERM.—*Potitical Economy*—Say's.
Geology—Lectures.
Botany—Lectures.
Physiology—Lectures.
German—Translations into German and select readings.

The SCIENTIFIC COURSE is the same as the Classical, omitting the *Ancient Languages*. Most of those, however, who pursue this course, take Latin, which is earnestly recommended.

Each student is expected to attend three recitations or lectures daily. There are also frequent exercises in Declamation and Composition.

The foregoing subjects of study are arranged under the following heads, each one of which is placed under the charge of a Professor, who is responsible for the progress and attainments of the students therein:

ETHICAL AND POLITICAL SCIENCE.

[Chair vacant.—Instruction given by Prof. Read.]

The instructions of this chair are rendered in course, to subgraduates of the fourth year, and to such other students of the University as elect to attend. The subjects of instruction are eminently adapted to prepare the student to become a good and useful citizen of the Republic, and to fit him for civil service in the same. The course occupies a year, one exercise each day, as follows:

Ethics—Moral Obligation; Development of Moral Law; Sanctions of Moral Law; Practical application of the Science.

The text book, Wayland's Elements of Moral Science, is used, merely as suggesting a convenient series of topics for oral lecture, and for familiar discussion in class.

Civil Polity—Political Ethics; Science of Government; The American Constitution; International Law; History of Civilization.

This class of subjects is taught wholly by lecture, with intermediate examination and discussion. The student is required to write out his views on each topic, and at stated periods, to read his results before the class.

Political Economy—Production of Material Wealth; Distribution; Exchange and Consumption; Applications of the Science; Relations to Civilization.

The discussion of this subject in class, is in the order of topics suggested by Say in his Treatise on the Production and Consumption of Wealth.

MENTAL PHILOSOPHY, LOGIC, RHETORIC, AND LITERATURE.

Daniel Read, LL. D., *Professor.*

The instructions of this chair are rendered to subgraduates of the first, third and fourth years. An *extra* course on English Literature will be given annually to students not of the regular classes.

The course of instruction in *Intellectual Philosophy*, embraces an analysis of the powers of the human mind, *active* and *moral*, as well as those denominated *intellectual*, the examination of those powers in reference to criticism, to teaching, to the improvement of the individual and the progress of society. It includes, also, a critical review of the systems of philosophy, which have prevailed among men.

Logic is taught as to its principles and application; an outline of the laws of evidence and human belief is given ; and in connection with this part of the subject, the evidences of Christianity are examined.

Rhetoric, so far as it relates to the subject of *invention* and *disposition*, is taught by lectures, upon the basis of Quintilian and Cicero ; and as regards *style* and *criticism*, upon that of modern writers.

In the course of English Literature are included the history of the English language, an examination of its elements, powers and grammar, and the history of English Literature in its various departments.

In *history*, Webber's outlines will be used as a text-book, and a course of lectures will be given on the civil history of the United States.

The course in this department for the term beginning February 8th, will be the following:

I. Mental Philosophy—Embracing analysis of the faculties of the human mind, *active* and *moral*, as well as those denominated *intellectual;* examinations of these powers in reference to criticism, to teaching, to the improvement of the individual and the progress of society.

The course embraces a critical review of the systems of Philosophy which have prevailed among men.

The instruction of the department is conducted by means of text-books (Haven) and lectures. The student is required to give orally or upon the blackboard, an analysis of every subject, as well as to prepare carefully written abstracts and dissertations upon assigned topics. Hour from 10—11 A. M.

II.—Class in English—History of English Language ; its composition, grammar structure of sentences, punctuation. History of the progress of English Literature in its various departments. Hour 11—12 A. M.

III.—Speaking and Composition—All students required to engage in these exercises. 3 P. M.

MATHEMATICS AND NATURAL PHILOSOPHY.

J. W. Sterling, A. M., *Professor*.

COURSE OF STUDY.

First Year.

Terms.
1. Algebra—Loomis'.
2. Algebra completed—Solid and Spherical Geometry—Plane Trigonometry.
3. Applications of Trigonometry to Surveying, &c., and use of instruments—Spherical Trigonometry.

Second Year.

Terms.
1. **Analytical Geometry—Smith's.**
2. **Differential and Integral Calculus—Smith's.**
3. Applications of the Calculus, Mechanical Philosophy —Snell's Olmstedo—Lectures.

Third Year.

Terms.
1. Natural Philosophy—(Snell's, Olmsted) Lectures on General Physics.
2. Natural Philosophy, &c., continued.
3. Astronomy—Olmsted, (Snell's)—Loomis.

For admission to this course, candidates will, in future, be required to have a thorough knowledge of Arithmetic, Mental and Written; The Elements of Algebra, (Ray's) and Plane Geometry, (Loomis'.) In this department there is one exercise daily for three years.

To secure thoroughness there will be frequent reviews, and written examinations on the subjects passed over.

On the various subjects of General Physics or Natural Philosophy, there will be weekly, extending throughout the year, at least two lectures accompanied by experimental illustrations. All who choose are permitted to attend these exercises.

Each regular member is expected to take notes of the lectures, and is frequently required to lecture on subjects previously discussed by the professor, repeating the experiments. This exercise is deemed important to cultivate in the student the habit of investigation and facility in communicating his knowledge.

Books of Reference in Natural Philosophy.—Loomis, Lardner, Silliman, Olmsted, Arnott, Muller, Library of Useful Knowledge, Brewster, (Optics,) Herschel, (Light and Sound,) Jackson, (Optics).

CHEMISTRY, NATURAL HISTORY AND THEIR APPLICATIONS.

EZRA S. CARR, A. M., M. D., *Professor.*

The instruction in this department is given by lectures and demonstrations on the part of the professor and students, together with examinations.

The recitation of the student consists in his giving a lecture, illustrated with experiments and demonstrations on the same subject and after the manner of the Professor, thus not only necessarily acquiring an intimate knowledge of the subject discussed, but at the same time the faculty of communicating his knowledge.

The subjects discussed embrace a full illustration of all the topics of theoretical or practical importance, and their applications to the useful acts, the processes of common life, Agriculture, Philosophy, &c.

Fall Term.

Chemical Philosophy, Chemistry of the Non Metallic Elements, Fuel, Heating, Lighting, Ventilation, &c.

Winter Term.

Chemistry of the Metals and Metallurgy, Organic Chemistry, including the Chemistry of Animal and Vegetable Life, the Preparation, Preservation, Uses of food, &c.

Spring and Summer Term.

Botany.—The Plant being first considered as an individual in reference to the nature and processes of vegetable life; Second, its relation to other plants, or the Vegetable Kingdom; Third, its uses.

Geology.—Considered especially in relation to the uses of rocks, and their relations to useful minerals.

Text Books.

Chemistry.—Silliman, Regnault, Gmelin, Johnston's Chemistry of Common Life, Townsand's Hand Book of Household Science, Knapp's Technology.

Botany.—Wood, Grey's Works, Lindley's Vegetable Kingdom.

Geology.—Hitchcock's Lyell, Delabeche, Geological Reports of the different States.

ANCIENT LANGUAGES AND LITERATURE.

James D. Butler, A. M., *Professor.*

COURSE OF STUDY.

FIRST YEAR.

Latin.

Terms.
1. Livy.
2. Livy, continued.
3. Horace—Odes.

Greek.

Terms.
1. Xenophon—Anabasis, or Cyropedia.
2. Xenophon—Memorabilia.
3. do do

SECOND YEAR.

Latin.

Terms.
1. Horace—Satires—Prose Composition.
2. Horace—Epistles— do
3. Horace—Completed— do

Greek.

Homer, Iliad. Owen through the year.

THIRD YEAR.

Latin.

Terms.
1. Tacitus, History or Annals.
2. Tacitus, or Juneval.
3. Juvenal and Persius.

Greek.

Terms.
1. Demosthenes de Corona, or Thucydides.
2. do do do
3. Plato or Æschylus.

The grammars used, are Crosby for Greek, and Andrews' (Revised Ed.) for Latin. For all but the most advanced students, the new Latin Dictionary by Crooks and Schem is recommended as by far the best.

Classical Geography will be illustrated by Kiepert's mural maps, the whole series of which hangs in the class-room. The light always radiating from words upon things, as on religion, art, philosophy, nationality, and the whole manner of ancient life, will be daily traced. No pains will be spared to make the classical languages elucidate our own vernacular. Throughout the curriculum, the study will be an exercise, not of mere verbal memory, but of philosophical memory, of discrimination, of rendering reasons, and of research concerning things, no less than words.

The time needful for completing this course will vary with the diligence and previous attainments of students.

Among the reference books which it is desirable that philological students should have on their tables—in addition to the grammars, of Crosby for Greek, and Andrews for Latin, and Liddel and Scott for Greek, may be mentioned:

Rich's Companion to the Latin Dictionary and Greek Lexicon.

Smith's Dictionary of Greek and Roman Geography, Biography, Mythology and Antiquities. 6 vols. 8vo.

Doederlein's Latin Synonymes.

Finlay's Classical Atlas.

Becker's Gallus and Charicles.

MODERN LANGUAGES AND LITERATURE.

J. P. Fuchs, M. D., *Professor.*

a.—GERMAN.

1. *Class of Beginners.*

First Term.—Elements of the German Language, after Ahn's Method.

Second Term.—Tiark's Grammar. Translations from English into German. Woodburg's Reader.

Third Term.—Translations into German. Select readings from German Prose writers and Poets.

2. *Advanced Class.*

German Composition. Exercises in German Conversation. Readings from Gœthe's or Schiller's Works. Synopsis of the German Literature.

b.—FRENCH.

First Term.—Fasquell's Course.

Second Term.—Robertson's Method.

Third Term.—Reading from Chapsal's Lecons et Models de Literature.

BOOK-KEEPING AND COMMERCIAL CALCULATIONS.

DAVID H. TULLIS, *Instructor.*

This School has for two years been in successful operation in the city of Madison under the denomination of "Bacon's Commercial College." It is now a part of the University, and will soon be transferred to the rooms designed for it in the main edifice. At present rooms are occupied in Bruen's Block. The course of study consits of,

1st, Single and Double Entry Book-Keeping, embracing the various departments of Trade and Mercantile accounts, viz : Wholesale and Retail, Stock and Partnership Books, Shipping, Steam Boating, Railroading, Banking, Manufacturing, Commission, Joint Stock and Company Business.

2d. Commercial calculations, comprising the system of calculations appertaining to Percentage, Equation of Payments, Compound Equations, Exchange, (Domestic and Foreign,) Arbitration of Exchange, General Average, Arbitration of Merchandise, Tonnage of Vessels, Storage, and Custom House Transactions.

3d. Business Penmanship.

4th. Commercial Forms and Correspondence, including Forms of Invoices, Accounts current, Account Sales, Bills of Lading, Promissory Notes, Orders, Checks, Drafts, Bills of Exchange, Articles of Copartnership, and Business Letters.

5th. Lectures on Customs of Merchants, Rules of Trade, Commercial Law, Political Economy, &c., &c.

It is the purpose of the Board of Regents in the establishment of this Instructorship, to afford the student an ample opportunity to qualify himself for prosecuting the Mercantile Profession in any Department, and to any extent.

Students are taught separately, and not in classes, and can enter at any time they choose.

PREPARATORY DEPARTMENT.

Experience in this University, as in our Western Universities generally, has demonstrated the necessity of provision for instruction in branches which are properly preparatory to the different University courses. Young men of mature age often come to the University for instruction in some of its appropriate subjects, who wish also to perfect themselves in more elementary branches. To close the doors of the University upon this class of young men, or not to afford them the facilities of instruction which they need, would be greatly to limit the sphere of its usefulness as a State Institution.

Provision is therefore made for full preparatory instruction, at the University Buildings. This instruction, under the direction and supervision of the Faculty, will be rendered by a competent Tutor. Those wishing preparation for the regular classes, merely a business education, or improvement in preparatory studies, with reference to teaching, will find within the University instruction adapted to their especial wants.

Students, of a suitable age, in this department, are allowed to occupy rooms in the University buildings.

TERMS OF ADMISSION.

Candidates for admission to the first year of the *Classical Course*, must pass a satisfactory examination in the Common Branches, the elements of Algebra, (Ray's) Plane Geometry, (Loomis') Latin Reader, Cæsar or Cornelius Nepos, Virgil's Æneid, (six books—the edition of Frieze is preferred as far the best) Crosby's Greek Lessons, and the Anabasis of Xenophon.

Instead of these particular works in Latin and Greek, any equivalent will be accepted.

For admission to the first years of the *Scientific Course*, the requirement is the same as for the Classical Course, omitting the Ancient Languages.

Candidates for advanced standing are also examined in the stuties to which the class they propose to enter have attended.

Such as desire to pursue a *Select Course* will be admitted to any of the recitations for which they may be prepared.

Applicants for admission must present testimonials of good moral character. Students are received from other States.

EXAMINATIONS.

Each term is closed by a public examination of all the classes, at which every member of each class is required to be present. At the close of the year, the members of the regular classes will be examined in all the studies pursued during the year; and none

Many students board themselves in their rooms for less than $1 per week.

Payment of University charges is required strictly *in advance*.

There are no extra charges except for actual damages by students.

It is the object of the University to afford the youth of the State the best education, both Scientific and Practical, and at the lowest rates.

At no similar institution in the land are the expenses of education less than in the Wisconsin University.

The location of the Institution, it is well known, is among the most beautiful and healthful any where to be found.

Communications addressed to the undersigned will receive prompt attention.

J. W. STERLING, *Dean of the Faculty.*

THE ALUMNI ASSOCIATION.

No where do men in the midst of life turn more fondly than to the scenes of their early studies, or the forge of their minds; and with no associates of after years are their hearts more knit together than with those side by side with whom they have served through literary campaigns. Hence, none of our older collegiate institutions is without a society composed of those who have run through its curriculum and been decorated with its honors. As the University was last summer sending forth its eighth class of graduates, it seemed to those of her sons then present that it was already high time to cluster her scattered children into a brotherhood.

Accordingly, on the evening of commencement day, June 26th, a meeting was called; an ALUMNI ASSOCIATION organized; and the following officers were elected:

C. T. Wakeley, President, J. F. Smith, Vice President,
J. M. Flower, Cor. Secretary. W. F. Vilas, Recording Sec'y,
T. D. Coryell, Treasurer,
Sidney Foote, S. W. Botkin, H. Vilas, Executive Committee.

It was also voted that the association should be annually addressed by an orator and a poet, in connection with the commencement exercises. At the same meeting C. T. Wakeley, Esq., the oldest graduate of the institution, was elected orator, and Sidney Foote, Esq., his alternate; R. W. Hubbell, Esq., from the class of 1858, was elected poet, and William H. Church, of the class of 1861, his alternate.

It is confidently hoped that this new organization, and the new feature in the commencement anniversary, will make that occasion more than ever a rallying point for all the alumni, and will redouble their interest in their Alma Mater, as well as in one another.

ANNUAL REPORT

OF THE

Regents of the University

OF THE

STATE OF WISCONSIN,

FOR THE

YEAR ENDING SEPTEMBER 30, 1862.

MADISON:
WM. H. ROBERTS, STATE PRINTER—ARGUS OFFICE.
1862

ANNUAL REPORT

OF THE

BOARD OF REGENTS

OF THE

UNIVERSITY OF WISCONSIN.

FOR THE

Fiscal Year ending September 30, 1862.

MADISON, Sept. 30, 1862.

To His Excellency,
EDWARD SALOMON, Governor of Wisconsin:

SIR—I have the honor to transmit through you to the Legislature the Annual Report of the Board of Regents of the University of Wisconsin for the year ending this day.

Very respectfully,
Your obedient servant,
J. L. PICKARD,
Pres't pro tem., Regents.

To the Honorable the Legislature of the State of Wisconsin:

GENTLEMEN—The Board of Regents of the University of Wisconsin, respectfully submit to your honorable body the

FIFTEENTH ANNUAL REPORT

of the condition of the institution, under their charge, for the fiscal year ending September 30th, 1862.

The prosperity of the University during a year of so much excitement, is to us a matter of rejoicing. Its numbers have been somewhat diminished by the earnest call of our beloved land for intelligent and educated young men. It must fill every patriot heart with delight, that this call has been so cheerfully answered from all our higher institutions of learning, and from none more cheerfully or readily than from the State University. It is a proof of lessons of patriotism well given and thoroughly learned. The state may well feel pride in her institutions, that are doing so much to protect her honor and advance her interests, and she should lend most cheerfully a helping hand in their time of financial distress.

The *resources* of the University upon the first day of October, were as follows:

Amount due on certificates of sale	$186,860 22
Amount due on loans	54,291 54
Cash in state treasury	2,131 42
Total principal of the fund	$243,283 18

The above does not show the actual interest paying principal, since the forfeitures for the year cannot be determined until after the sales in November. Last year there was a forfeiture of certificates and of loans amounting to nearly $21,000, as may be seen by comparison of last year's account with the account of the present year. The forfeitures for the present year can hardly be less than those of 1861.

The income upon the principal fund, as reported above, should be $17,029 82.

The actual income receipts for the year ending Sept. 30, 1862, were $13,986 70.

This income is diminished by charges made by the state, as follows:

Clerk hire in land office	$800 00
Share of expenses for land protection	147 30
Printing	27 92
	975 22
Leaving balance of income	$13,011 48

The *indebtedness* of the University at the beginning of the year, under review was as follows:

On loans from school fund	$30,000 00
" " from university fund	39,810 00
" " from general fund	5,000 00
" " from J. D. Ledyard	5,000 00
" outstanding ten per cent. warrants	13,416 27
Total indebtedness	$93,226 27

By an act of the legislature of 1862, (chapter 268, General laws of 1862,) there has been paid of this debt $45,810 00, leaving our present indebtedness $47,416 27, which is being gradually reduced, as funds for that purpose are paid into the state treasury. The act of the legislature providing for the payment of University debts, did not take effect until after the time for paying interest upon indebtedness and receiving interest upon certificates and loans. Hence the account of resources and of income receipts is, as it would have been without any such provision of law, and from the net income for the past year must be deducted the interest upon the full indebtedness. This will leave an income available for university purposes of only $6,233 16. That this amount will not be very materially increased in years to come, unless more prosperous times return, may be seen by the following statement:

Taking the actual income receipts for the past year, as a basis we have a productive capital of..........................	$199,810 00
Diminished by the payment in full of debts to the amount of	93,226 27
There will be left after the provisions of the act of the last legislature shall have been carried into effect...............	106,583 73
The interest upon which, at 7 per ct per annum, would be.	7,160 86
Less state charges for care of fund...............................	975 22
Leaving a net income of..	$6,185 64

This amount may be increased by sales of forfeited lands, but it is as likely to be diminished by further forfeitures.

Eventually this income must be considerably increased as lands will find a more ready sale, but we have to do with the *present*, and the question with us should be: How are we to meet present necessities? The necessary expenses of conducting the University upon its present plan, without a much needed Chancellor, are not less than $7,500 00 per annum. The legislature may provide for this deficit by a repeal of the statute requiring commissioners to charge the university fund for the expenses of its care. It is questionable whether the state has any right to charge for the care of the fund. The general government gave in trust to the state, lands for the support of a University. The state accepted the trust and through her representatives made the following constitutional provision:

"The proceeds of all lands, that have been or may hereafter be granted by the United States to the state for the support of a university, shall be and remain a perpetual fund to be called the *University fund*, the interest of which *shall be appropriated to the support of a State University*, &c."

A strict construction of this provision would not allow any expenditure for the care of the lands. This expense the state assumed when she accepted the trust. The trust with all its responsibilities was accepted. The responsibilities should not be ignored.

The constitution makes it the duty of the state to establish a University in the following words: "Provision shall be made by law for the establishment of a State University," &c. This makes it obligatory upon the state to establish such an institution irrespective of the aid granted by the general government. But admitting that the provision under consideration was made with direct reference to the appropriation by Congress, it cannot for a moment be supposed that the state is absolved from all responsibility as soon as the fund becomes insufficient to the end sought, least of all when the fund has been diminished through her own management of it. Had not successive legislatures allowed the use of the fund for other purposes than those originally designed, it would be amply sufficient to-day for all the purposes of a University. By legislative authority, nearly half of the capital is locked up in buildings. By legislative authority debts have been contracted, and the interest upon these debts has consumed the fund, Less liberality at a time when the income was ample, would have saved the University from embarrassment at present.

Somewhat of extravagance was allowed, if not encouraged, by the state through the legislature. No wrong was intended. It was done under the spur of prosperity, with the expectation of meeting all the liabilities incurred out of an already large income. There was no thought of the future No one dreamed that the income would ever be less. It might be largely increased, but the possibility of a diminution was not admitted. Adversity has come. There have been large forfeitures of lands. Extravagance has eaten into the very heart of a wasting fund. Interest upon indebtedness has consumed some of the principal. We have ample buildings but an exhausted treasury. Who shall replenish it? To what source can we look but to the state, through whose innocent instrumentality it has become exhausted. The general government holds her trustee responsible. The constitution of the state acknowledges the responsibility.

The care of university funds should be given to the University, and further than this, money already taken from the University treasury for that purpose should be restored. This act of justice would be a relief to the University of permanent value.

At any rate the state acts not the part of a kind parent in making her children pay for the care of funds given her for their benefit. At a time when the trifle charged would be of so great value to the University, it seems more than ever desirable as well as just and generous, that section 76 of chapter 28, R. S., should be so amended as to provide for compensation of clerks in the school land office out of the general fund of the state.

Reference to appendix "A" and "B" will show the financial condition of the University and a detailed statement of the transactions of the past year.

Appendix "C" gives a statement of the condition of the University as to scholarship deportment and attendance, and in appendix "D" may be found a catalogue of officers and students for 1861–2.

MEETINGS OF THE BOARD OF REGENTS.

The Board of Regents has held two meetings during the year.

At the first meeting held January 15th and 16th, the following Regents were present viz.: Messrs. Conover, Davis, Frank, Lewis, Pickard, Salomon, Stewart and Vilas.

Committees were appointed to confer with legislative committees upon the recommendations made by Gov. Harvey in his annual message relating to the establishment of a military department in the University, and upon the subject of the indebtedness of the University.

The salary of the Professor of Modern Languages was raised from $800 to $1000 per annum.

The executive committee was authorized to place a water tight roof upon University Hall.

The Superintendent of Public Instruction was elected to serve as President *pro tem.* of the Board until the election of a Chancellor.

The second meeting was held upon June 24th and 25th. Present—Regents Conover, Davis, Lewis, Pickard, Prentiss, Salomon, Stewart, Tenney and Vilas.

The usual communications were received from members of the Faculty and placed on file.

The degree of Bachelor of Arts was conferred upon Michael Leahy, and the degree of Bachelor of Philosophy upon Isaac N. Stewart, at the Commencement exercises, June 26th.—Prof. Sterling acting in place of Chancellor by request of the Board of Regents.

The degree of Master of Arts was conferred upon the following graduates of the class of 1859: Alexander C. Botkin, Leonard S. Clark, Samuel Fallows, Edward B. Guild, Elbert O. Hand, and Edwin Marsh.

The honorary degree of LL. D. was also conferred by vote of the Board upon His Excellency, Edward Salomon.

The provisions of chapter 268 of General Laws of 1862 were formally accepted by the Board of Regents, and the School Land Commissioners were so notified, through the Secretary of the Board of Regents, by the following resolution.

Resolved, That this Board desires to accept the provisions of chapter 268 of General Laws of 1862, and to have the principal of the University Fund applied to the payment of the debts of the University in the manner provided in that act so far as practicable; and that the executive committee be instructed to communicate with the Commissioners of School and University Lands upon this subject, and adopt the necessary measures to have the wishes of this Board carried into effect.

The matter of establishment of a Normal School in connection with the University was under advisement and referred to the executive committee for investigation and final action, if they should be unanimous in their views.

Regents Pickard and Prentiss were appointed a committee to prepare the Annual Report of the Board of Regents.

All of which is respectfully submitted,

J. L. PICKARD,
T. PRENTISS,
Committee of Regents.

APPENDIX.

"A"

SECRETARY'S REPORT.

MADISON, Oct. 1st, 1862.

To the Board of Regents of the University of Wisconsin:

The Secretary of the Board of Regents respectfully reports, that during the fiscal year ending the 30th day of September, ultimo., warrants have been drawn on the Treasurer of the Board, as follows, to wit:

ON THE INCOME FUND.

Date.	To whom, and for what.	Amount.
1861		
Oct. 4	William Flanagan, services as janitor	$150 00
" 17	P. L. Neuman, labor on University	87 12
" 28	Bowen & Ramsey, hardware	32 29
" 29	M. E. Fuller, Merchandise	9 26
" 31	J. W. Sterling, furniture, ringing bell, rep's on building	38 00
" 31	same, taking Smithsonian observations	16 00
Nov. 15	J. B. Parkinson, salary	125 00
" 29	J. W. Sterling, advance for incidental expenses	200 00
Dec. 31	D. H. Tullis, salary as secretary	25 00
" 31	Daniel Read, do	250 00
" 31	J. W. Sterling, do	250 00
" 31	James D. Butler, do	250 00
" 31	E. S. Carr, do	260 00
" 31	J. P. Fuchs, do	200 00
" 31	J. D. Par inson, do	125 00
1862		
Jan. 10	Patrick Welch, services as janitor	75 00
" 17	M. Frank, mileage and per diem as regent	18 50
" 17	J. W. Stewart, do do	18 40
" 17	M. M. Davis, do do	18 00
" 24	J. W. Sterling, advance for incidental expenses	150 00
Mar. 12	R. K. Findley, merchandise	17 68
" 14	T. Brown, treas., int. paid on 10 ℘ ct. construction warrants	89 00
" 14	T. Brown, do do do	20 00
" 14	T. Brown, do do do	35 00
" 14	T. Brown, do do do	90 00
" 14	T. Brown, do do do	110 00
" 17	Wisconsin Patriot, advertising	2 00
" 28	John N. Jones, hardware	2 58
" 28	Mosely & Bro., Repairing seal of University	8 50
" 28	Trustees of Baptist Church, use of ch. commencement day	10 00
" 28	Assignees of Crosby, Nichols, Lee & Co., For. Reviews, &c.	20 00
" 28	Faculty of University, amount paid for ringing bell	10 50
" 28	same am't paid for taking Smith. observa.	10 50

"A"

Secretary's Report—continued.

Date.	To whom, and for what.	Amount.
1862		
" 29	N. W. Dean, hauling coal from depot	2 19
" 29	Wisconsin Patriot, printing for Literary Societies	1 50
" 29	Atwood & Rublee, printing and advertising	25 00
" 29	same printing schemes for exhibition	5 00
" 31	D. H. Tullis, salary as secretary	25 00
Mar. 31	J. W. Sterling, salary	$250 00
" 31	J. P. Fuchs, do	250 00
" 31	James D. Butler, do	250 00
" 31	E. S. Carr, do	250 00
" 31	Daniel Read, do	250 00
" 31	J. B. Parkinson, do	125 00
April 8	T Brown, Treasurer, interest paid on loans to University	408 00
" 8	Patrick Welch, services as Janitor	75 00
" 15	Wisconsin Patriot, advertising	1 50
" 15	Faculty of the University, amount paid for ringing bell	10 50
" 15	same am't paid for Smithsonian observat'ns	10 50
" 16	Jacob Lenz, wood	980 00
June 3	Miller & Griffin, insurance	225 00
" 3	T. Brown, Treasurer, interest paid on loan from school fund	2,100 00
" 19	A. Pickarts, instruction in music	50 00
" 23	J. W. Sterling, advance for contingent expenses	50 00
" 25	J. W. Stewart, mileage and per diem as Regent	13 40
" 25	M. M. Davis, do do do	18 00
" 25	Theodore Prentiss, do do do	11 40
" 26	J. B. Parkinson, salary	125 00
" 26	James D. Butler, salary	250 00
" 30	D. H. Tullis, Secretary, salary	25 00
" 30	J. W. Sterling, salary	250 00
" 30	Daniel Read, salary	250 00
" 30	E. S. Carr, salary	250 00
" 30	J. P. Fuchs, salary	250 00
July 3	Patrick Welch, services as Janitor	75 00
" 7	T. Brown, Treasurer, salary, &c., paid Dr. D. B. Reid	150 00
" 17	J. H. Lewis, settees for University Hall	22 50
" 26	T. Brown, treas., int. pd. on 10 ₩ ct. construction warrants	102 52
" 26	T. Brown, treas., do do	120 88
" 26	Daniel Read, interest on do do	410 00
" 26	J. W. Sterling, advance for incidental expenses	100 00
" 31	W. H. Wyman, agent, insurance	180 00
Aug. 20	T. Brown, treasurer, interest paid on loan to University	402 00
Sept. 29	J. P. Fuchs, salary	250 00
" 30	D. H. Tullis, Secretary, salary	25 00
" 30	James D. Butler, salary	250 00
" 30	E. S. Carr, salary	250 00
" 30	J. W. Sterling, salary	250 00
" 30	Daniel Read, salary	250 00
" 30	J. B. Parkinson, salary	125 00
" 30	Patrick Welch, services as janitor	75 00
	On Income fund	$12,478 17

"A"

Secretary's Report—concluded.

ON PRINCIPAL FUND.

(See chapter 268, general laws of 1862.)

Date.	To whom, and for what.	Amount.
1862		
Apr. 29	C. V. N. Kittridge, tin for repairing roof of University Hall	$199 50
July 5	James Livsey, mason work on University Hall	85 62
Aug. 19	T. Brown, treas., ten per ct. warrants redeemed, with int	975 82
" 19	P. L. Neuman, repairing chimneys of University buildings	100 00
" 19	same repairing roof of University Hall	300 00
	On Principal fund	$1,610 94
	On Income fund	12,478 17
	Total	$14,084 11

The foregoing list of warrants issued during the last fiscal year may be appropriately classified and charged to the following sources, to wit:

Salaries of Professors	$5,775 00
Salary of Secretary	100 00
Salary of Janitor, ($150 upon previous year)	450 00
Contingent expenses and repairs	776 57
Insurance	406 00
Interest	8,958 22
Main edifice	585 12
Library	78 00
Milage and per diem of Regents	92 70
Fuel	980 00
Furniture for main edifice	88 50
Ten per cent construction warrants redeemed	900 00
	$14,084 11

D. H. TULLIS, Secretary.

"B"

HON. J. L. PICKARD,
Prest. of Board Regents of University of Wisconsin:

Herewith please find my report as Treasurer of the University, containing a detailed statement of the receipts and disbursements from October 1st, 1861, to 30th ultimo, from which it appears the receipts were thirteen thousand eight hundred and eighty-eight and 50-100 dollars, and the disbursements fourteen thousand four hundred seventy 78-100 dollars, leaving due the treasurer a balance of five hundred eighty two 28-100 dollars.

TIMOTHY BROWN,
Treasurer of Wis. University.

MADISON, Wis., Oct. 1, 1862.

REPORT of receipts and disbursements by the Treasurer of the University from October 1st, 1861, *to Sept.* 30*th,* 1862, *inclusive.*

RECEIPTS.

Date.		Amount.
1861		
Oct. 1	From N. W. Dean, late treasurer	$1,727 25
" 4	" Prof. J. D. Butler, wood	41 25
1862		
Jan. 16	" State Treasurer, income fund	800 00
Feb. 25	" do	500 00
Mar. 29	" do	3,000 00
Apr. 16	" do	500 00
May 12	" do	700 00
June 4	" do	2,100 00
" 20	" Prof. J. D. Butler, wood	20 00
" 30	" State Treasurer	3,000 00
Aug. 15	" do	1,500 00
		$13,888 50

DISBURSEMENTS.

Date.	No. o Voucher.	To whom, and for what.	Amount.
1861			
Oct. 29	1192	Bowen & Ramsay, hardware	$ 32 29
Nov. 22	1196	J. B. Parkinson, salary	125 00
" 29	1197	J. W. Sterling, expenses	200 00
" 29	1195	do making observations	16 00
" 29	1194	do bills paid by faculty	38 00
Dec. 18	1191	P. L. Neuman, labor	37 12
" 18	1185	Jas. Campbell. labor on main edifice	181 47
" 18	1190	Wm Flanagan, salary as janitor	150 00
" 31	1198	D. H. Tullis, salary	25 00
" 31	1199	Prof. Daniel Read, salary	250 00
" 31	1201	Prof. J. D. Butler, do	250 00
" 21	1208	Prof. J. P. Fuchs, do	200 00

"B"—continued.

Date.		No. of Voucher.	To whom, and for what.	Amount.
1862				
Jan	11	1193	M. E. Fuller, Merchandize	$ 9 28
"	17	1206	Michael Frank, mileage and per dien, Regent	18 10
"	18	1202	Prof. E. S. Carr, salary	250 00
"	18	1208	M. M. Davis, mileage and per diem, Regent	18 00
"	25	1204	J. D. Parkinson, salary	125 00
"	25	1209	Prof. J. W. Sterling, salary	250 00
"	30	1200	do expenses	150 00
"	31	1205	Patrick Welch, salary as janitor	75 00
Mar.	7	1207	J. W. Stewart, mileage and per diem	13 40
"	8	1125	Joseph Chatterson, superintending university hall	255 20
"	14	1210	R. K. Findlay, merchandize	17 68
"	29	1225	Atwood & Rublee, printing	25 00
"	29	1226	do do	5 00
"	29	1216	Wisconsin Patriot, advertising	2 00
"	29	1224	do printing	1 50
"	29	1223	N. W. Dean, hauling coal	2 19
"	31	1227	D. H. Tullis, salary	25 00
"	31	1230	J. D. Butler, do	250 00
"	31	1231	E. S. Carr, do	250 00
"	31	1232	Daniel Read, do	250 00
Apr.	1	1218	Moseley & Bro, rep. seal	3 50
"	1	1220	Assignees of Crosby & Co, foreign reviews	20 00
"	1	1221	Faculty of University, ringing bell	10 50
"	1	1222	do taking observations	10 50
"	1	1228	J. W. Sterling, salary	250 00
"	1	1229	J. P. Fuchs, do	250 00
"	3	1234	T. Brown, treas., int. and exch'ge, Ledyard mort	408 00
"	5	1233	J. D. Parkinson, salary	125 00
"	8	1235	Patrick Welch, do	75 00
"	16	1239	Jacob Lenz, wood	980 00
"	16	1214	T. Brown, treas., interest, Prof. Read	90 00
"	16	1215	do do H. C. Keeler	110 00
"	16	1213	do do F. W. Lindhorst	85 00
"	16	1211	do do G. A. Mason	89 00
"	16	1212	do do C. R. Riebsam, M. D	20 00
"	29	1	C. V. N. Kittredge, tin for roof	199 50
May	5	1219	Trustees of Baptist Church, use of church	10 00
"	12	1217	J. N. Jones, hardware	2 58
June	4	1240	Miller & Griffin insurance	225 00
"	4	1241	T. Brown, treas., interest to school fund	2,100 00
"	10	1236	Wisconsin Patriot, advertising	1 50
"	21	1237	Faculty of University, ringing bell	10 50
"	21	1238	do taking observation	10 50
"	23	1242	A. Pickarts, salary	50 00
"	23	1243	J. W. Sterling, expenses	50 00
"	27	1245	M. M. Davis, mileage per diem	18 00
"	27	1247	J. B. Parkinson, salary	125 00
"	27	1244	J. W. Stewart, mileage and per diem	13 40
"	28	1246	T. Prentiss, do do	11 40
"	30	1249	D. H. Tullis, salary	25 00
"	30	1250	J. W. Sterling, do	250 00
"	30	1253	J. P. Fuchs, do	250 00
July	1	1248	J. D Butler, do	250 00
"	1	1251	Daniel Read, do	250 00

"B"—concluded.

Date.	No. of Voucher.	To whom, and for what.	Amount.
1862			
July 2	1216	Patrick Welch, salary	$ 75 00
" 5	1224	E. S. Carr, salary	250 00
" 7	1223	James Livsey, mason work	85 62
" 17	1226	J. H. Lewis, settees for hall	22 50
" 30	1259	Daniel Lewis interest on 10 per cent. warrants	410 00
" 30	1257	T. Brown, treas, do do do	102 52
" 30	1258	do do do do	120 88
" 30	1256	do salary, D. B. Reid	150 00
Aug. 1	1261	W. H. Wyman, ag't. insurance	180 00
" 4	1260	J. W. Sterling, expenses	100 00
" 19	3	T. Brown, treas., 10 per cent. warrants and int	975 82
" 20	4	P. L. Neuman, repairing chimneys	100 00
" 20	5	do do roof	300 00
" 20	1262	T. Brown, treas., int., Ledyard mortgage	402 00
Sept. 29	1263	J. P. Fuchs, salary	250 00
" 30	1264	D. H. Tullis, do	25 00
" 30	1266	E. S. Carr, do	250 00
" 30	1265	J. D. Butler, do	250 00
" 30	1267	J. W. Sterling, salary	250 00
" 30	1268	Daniel Reed, do	250 00
" 30	1269	J. B. Parkinson, do	125 00
" 30	1270	Patrick Welch, do	75 00
			$14,470 78

MADISON, Wis., Sept. 30, 1862.

We have examined the books and vouchers of T. Brown, Esq., treasurer of the University of Wisconsin, and compared them with the books, accounts and warrants of the secretary of the Board of Regents, for the fiscal year ending Sept. 30th, 1862, and find that there is a balance in favor of the treasurer, of five hundred and eighty-two dollars and twenty-eight cents ($522 28.)

J. L. PICKARD,
C'hn *pro tem.*, of Ex. Com.
D. H. TULLIS,
Secretary.
Auditing Com. of University of Wisconsin.

"C"

REPORT *of the Faculty on the Numbers, Prospects, and Workings of the Institution.*

The number of students enrolled on the books of the University during the last year, has been one hundred and twenty-nine, namely: In the first term ninety-seven; in the second fifty-four; and eighty in the third. During the present session the number in attendance has been seventy. The aggregate of the last year has been well nigh identical with that of the one before it.

But within the last year, at least twenty-six individuals have fallen out of our classes to enter the army, and we are assured that a still larger number have been kept from becoming members of the Institution, through feeling constrained to become soldiers themselves, or through being needed at home, because other members of their families had enlisted.

Had it not been for these drawbacks, it cannot be doubted but that the University would have been resorted to by larger classes, than in any previous year of its existence.

The present arrangement of terms was last year adopted with a view to enable those whose circumstances require it, to teach each year four months, and at the sane time pursue the University course during two full terms. Knowing how far our students are from riches, we were agreeably disappointed to see fifty-four students in our class-rooms last winter. We dare not expect so many the present season, as the demand for primary teachers will be more pressing than ever, since so many, lately of that class, are now serving their country in the field.

All the colleges in our country were fearfully thinned during the Revolutionary struggle, and have proportionally suffered from every other war with which our land has been afflicted. At the close, however, of each of these contests, academic halls were sought, not only by those who might naturally have been looked for, but by not a few unexpected students. The reason is obvious, In every regiment there are not a few in the ranks, as well as above them, in whom military life, demonstrating that knowledge is power, has wakened a craving, before unfelt, for liberal education. Such aspirants to culture, when disbanded, also find themselves with money, which but for military service some of them would never have had, to defray the expenses incident to their intellectual advancement.

It is no wonder, then, that the annals of Yale and other colleges, mention students, who, having been soldiers till past the average age at which classes graduate, have then been, as it were, born out of due time into the literary world, and have at the eleventh hour taken by force the kingdom of knowledge. Nor have such instances been uncommon abroad. Sir Charles Napier, after being left for dead on the battle-field of Corunna, and having served seventeen campaigns as a subaltern, for several years pursued a course of study in the military college of Sandhurst. What has been, will be. On that bright day—which may Heaven hasten!—when the angels shall proclaim that our warfare is accomplished, many a son of Wisconsin who has gone down to the battle for her in his own person, will set his face toward the State University on the delectable hill to which he looked up longingly from the tedium of Camp Randall,—that seat of delightful studies which, etherealized by distance and memory, has risen before him on the Kansas and Chickahominy as the home of his heart and hopes. This is no fancy, it is the testimony of our camp correspondents.

While, then, many unendowed seminaries must close, through the pressure of the times, let our patriot soldiers when, jeoparding their lives on the high places of the field, they shall have shut for us the gates of Janus, find the portals at least of the State University wide open to welcome them to the treasures of science.

Last year—as formerly,—several of those who had repaired to the University, have been interrupted by poverty,—but both they and well-nigh all members of the institution, have been commendably receptive of instruction,—in earnest to learn,—seldom absent from any exercise, and more seldom unprepared for any duty. Never have we had fewer triflers to mourn over—as so *vaccinated* with knowledge—that they will never take much of it. While the military drill, kept up through two thirds of the year, besides enabling most who have left us for the army, to start as officers, has heightened the physical vigor of all who have shared in it, and thus given a sympathetic aid to their mental efforts, the daily outlook on the manoeuvres in the camp has seemed to stimulate all to a corresponding self-denial and energy in their own field of duty.

On two occasions, three years ago last winter, and one year ago last spring, the continuity of classes was disturbed, one Greek recitation being omitted for lack of students, but during the last year no class has been broken up, but every department has had representatives throughout every stage of its curriculum.

Appended may be found a more detailed statement of numbers in attendance upon the several classes each term of the year.

FIRST TERM, COMMENCING AUG. 28, 1861.

	Classical.	Scientific.	Total.	
Seniors	1	4	5	
Juniors	4	1	5	
Sophomores	11	8	19	
Freshmen	13	10	32	
Preparatory Department	...	...	36	
Whole number in attendance				97

SECOND TERM, COMMENCING DEC. 11, 1861.

	Classical.	Scientific.	Total.	
Seniors	1	1	2	
Juniors	2	1	3	
Sophomores	3	1	4	
Freshmen	10	13	23	
Preparatory Department	...	...	22	
Whole number in attendance				54

THIRD TERM, COMMENCING MARCH 26, 1862.

	Classical.	Scientific.	Total.	
Seniors	1	3	4	
Juniors	4	2	6	
Sopohmores	8	7	15	
Freshmen	12	13	25	
Preparatory Department	...	...	31	
Whole nnmber in attendance				[illegible]

Whole number of students in attendance during the year closing June 26th, 1862	12[illegible]
Of these there were in the full Classical Course	[illegible]
In the scientific course	[illegible]
In the preparatory department	61
There have been in attendance during the present term	7[illegible]
Of these there are in the regular classes	39
In the preparatory department	31

"D"

CATALOGUE

Of the officers and students of the University of Wisconsin for the year closing June 25th, 1862.

Board of Regents.

J. T. LEWIS, Secretary of State, *ex officio*,		Madison.
J. L. PICKARD, Supt. of Public Public Inst. *ex officio*,		Madison.
JOHN G. McMYNN, Term expires 1863,		Racine.
CARL SCHURZ,	" "	Milwaukee.
HORACE A. TENNEY,	" "	Madison.
LEVI B. VILAS,	" "	Madison.
O. M. CONOVER,	" 1865,	Madison.
MOSES M. DAVIS,	" "	Portage.
NELSON DEWEY,	" "	Cassville.
HARRISON C. HOBART,	" "	Chilton.
M. FRANK,	" 1867,	Kenosha.
JOHN W. STEWART,	" "	Monroe.
THEODORE PRENTISS,	" "	Watertown.
EDWARD SALOMON,	" "	Milwaukee.
D. H. TULLIS, *Secretary*,		Madison.
TIMOTHY BROWN, *Treasurer*,		Madison.

Faculty.

JOHN W. STERLING, A. M.,

Dean of the Faculty, and Professor of Mathematics and Natural Philosophy.

DANIEL READ, LL. D.,

Professor of Mental, Ethical and Political Science, Rhetoric and English Literature.

EZRA S. CARR, M. D.,

Professor of Chemistry and Natural History.

JAMES D. BUTLER, LL. D.,

Professor of Ancient Languages and Literature.

JOHN P. FUCHS, M. D.,

Professor of Modern Languages and Literature.

J. D. PARKINSON, A. B., Tutor.

DAVID H. TULLIS,

Instructor in Commercial Calculations and Bookkeeping.

Graduates of the University.

NAME.	RESIDENCE.
JULY, 1854.	
Levi Booth, A. M.,	Pike's Peak.
Charles T. Wakeley, A. M.,	Madison.
JULY, 1856.	
Samuel S. Benedict, A. M.,	
James M. Flower, A. M.,	Madison.
Sidney Foote, A. M.,	Madison.
*Burgess C. Slaughter, A. M.,	Middleton.
JULY, 1857.	
*Sinclaire W. Botkin, A. M.,	Madison.
Thomas D. Coryell, A. M.,	Madison.
*Charles Fairchild, A. M.,	Madison.
William G. Jenckes, A. M.,	Terre Haute, Ind.
John F. Smith, A. M.,	Cincinnati.
JULY, 1858.	
*Richard W. Hubbell, A. M.,	Milwaukee
John W. Slaughter, A. B.,	Culpepper, Va.
*William F. Vilas, A. M.,	Madison.
JULY, 1859.	
*Alexander C. Botkin, A. M.,	Madison.
Hill C. Bradford, P. B.,	Virginia.
Leonard S. Clark, A. M.,	California.
*Samuel Fallows, A. M.,	Oshkosh.
Edward B. Guild, A. M.,	Kansas.
Elbert O. Hand, A. M.,	Racine.
*Edwin Marsh, A. M.,	Beaver Dam.
Philip C. Slaughter, P. B.,	Virginia.
JUNE, 1860.	
George W. Bird, A. B.,	Madison.
*Leander M. Comins, A. B.,	Maine.
Thomas J. Hale, A. B.,	Madison.
John B. Parkinson, A. B.,	Fayette.
*William P. Powers, A. B.,	Madison.
Milan W. Serl, P. B.,	Arkansas.
*Fred. T. Starkweather, A. B.,	Milwaukee.
*John E. Sutton, A. B.,	Madison.
JUNE, 1861.	
Farlin Q. Ball, P. B.,	Monroe.
James B. Britton, A. B.,	Madison.
*William W. Church, A. B.,	Madison.
*Almerin Gillett, P. B.,	Geneva.
S. Azariah Hall, A. B.,	Eau Claire.
*Michael Leahey, P. B.,	Portland.
John D. Parkinson, A. B.,	Madison.
William E. Spencer, A. B.,	Madison.
*Henry Vilas, A. B.,	Madison.

JUNE, 1862.

Gideon W. Allen,	Ann Arbor, Mich.
*Michael Leahey, A. B.,	Portland.
Isaac N. Stewart, P. B.,	Waukesha.

* In the army.

Under Graduates.

FOURTH YEAR.

Gideon W. Allen,	S	Trempealeau.
*Cary M. Campbell,	S	Madison.
*Michael Leahy,	C	Portland.
*Jefferson C. McKenney,	S	North Leeds.
Isaac N. Stewart,	S	Waukesha.

THIRD YEAR.

*Phineas J. Clawson,	C	Waukesha.
Milton S. Griswold,	C	"
*J. Dwight Tredway,	C	Madison.
Levi M. Vilas,	C	"
Frank Waterman,	S	"

SECOND YEAR.

*Moses L. Bradley,	C	Madison.
*James Bull,	C	Middleton.
Pitt Cravath,	S	Whitewater.
*William Fallows,	C	Hanchettville.
A. B. Griswold,	S	Watertown.
James L. High,	C	Black Earth.
C. Frank Holt,	S	Kenosha.
*William H. Keepers,	S	Madison.
John Leahy,	S	Portland.
Benedict S. Lewis,	C	Lodi.
*Aaron H. McCracken,	C	Monroe.
*Edward G. Miller,	C	Sweet Home.
*Pliny Norcross,	C	La Grange.
*Jotham Scudder,	C	Juda.
William Seaver,	S	Darien.
John C. Spooner,	C	Madison.
Charles F. Viebahn,	S	Lemonweir.
Washington I. Wallace,	C	Baraboo.
S. H. Watson,	S	Fulton.
J. F. Winnek,	S	Lake Mills.
O. P. B. Wright,	S	Emerald Grove.

FIRST YEAR.

*Thomas Bennett,	S	Beloit.
Charles P. Blackly,	S	Lodi.
Oscar S. Black,	S	Sextonville.
James A. Blake,	C	Elliota, Minn.
James Byrne,	C	Madison,
Eugene M. Congar,	S	Whitewater.
Romayne Davenport,	C	Monroe.
Joseph D. Dodge,	S	Neosha.
Geo. W. Esterly,	S	Whitewater.
Alexander Gill,	S	Farran's P't, C. W.
Isaiah Goldy,	S	Lyons, Iowa.
*Henry L. Gray,	C	Madison.
Geo. G. Green,	S	Milford.
Joseph G. Hall,	C	Monroe.
John M. Jones,	S	Ballston, N. Y.
*C. P. Larkin,	S	Milwaukee.
Edwin C. Mason,	S	Madison.
*J. E. Mathewson,	S	Neosho.
Geo. H. Miller,	C	Fitchburg.
John Muir,	S	Midland.
J. N. O'Brien,	S	Cascade.
Wm. L. O'Connor,	S	Ripon.
*Ceylon H. Olney,	C	Madison.
Abram Pool,	S	Beloit.
*John C. Pradt,	C	Madison.
Geo. H. Pradt.	C	Madison.
*M. H. Puffer,	S	Monroe.
A. H. Salisbury,	C	Oregon.
D. C. Salisbury;	S	Oregon.
W. C. Silverthorn,	C	Oakland.
Wm. Henry Spencer,	S	Evansville.
Asher Starkweather,	C	Columbus.
Phillipp Stein,	S	Waukesha.
*E. F. Stone,	S	Sun Prairie.
A. E. Valentine,	S	Ripon.
Charles Vilas,	C	Madison.
*Wm. A. Wyse,	S	Sauk City.

NOTE.—C classical. S scientific.

Preparatory Department.

Arthur A. Abbott,	Oregon.
D. F. Abbott,	Spencer, N. Y.
John S. Abbott,	Madison,
Seth A. Abbott,	Spencer, N. Y.
Phillip Barry,	Fitchburg.
Edwin S. Bean,	Madison.
James R. Birge,	Whitewater.

Chas. Birge,	Whitewater.
Wilmot Booth,	Madison.
Byron S. Bush,	"
James D. Butler,	"
Ezra Carr,	"
Simon Casey,	Blue Mound.
*Wm. W. Chadwick,	Monroe.
Geo. G. Colton,	Middleton.
Geo. Cross,	Heart Prairie.
John W. C. Dinsmore,	Ashton.
Newell H. Dodge,	Madison.
James Finnegan.	Barton.
Lewis Frost,	Madison.
Robt. B. Gilbert,	Fitchburg.
James D. Griswold,	Whitewater.
R. C. Hays,	Hebron.
*Hudson H. Helms,	Fitchburg.
*Robt. H. Henry,	Verona.
*Gilbert T. Hodges,	Monroe.
A. J. Howery,	Cross Plains.
John Howitt,	Sussex.
Eugene A. Jones,	Madison.
John Kavenaugh,	"
Clarence O. Kellogg,	"
Sam'l T. Lewis,	Lodi.
David E. Maloney,	Madison.
Geo. S. Marsh,	Whitewater.
William McComb,	Blooming Grove.
Benj. F McCormack,	Burke.
Charles McCormack,	"
Gilbert E. McKeeby,	Fitchburg.
Arthur C. Mills,	Madison.
John Mockett,	Genesee.
David G. Muir,	Midland.
James Muldoon,	Madison.
David B. Numan,	Middleton.
Torge J. Oleson,	New Lisbon.
Duncan Paton,	Markesan.
B. P. Patten,	Leister.
Arthur Peck,	Monroe.
John O. Regan,	Madison.
J. W. Remington,	Genesee.
William Richards,	Markesan.
*Albert J. Rockwell,	Oconomowoc.
Frederick Scheiber,	West Bend.
Clemens Schauroth,	Madison.
James S. Smith,	"
Stephen Timlin,	Dellona.
Chas. E. Vroman,	Stoner's Prairie.
Joseph C. Welling,	Black Earth.

DeLa Roy Webster,	Burke.
D. L. Webster,	"
Chas. H. Wildish,	Waukesha.
F. G. Winnek,	Lake Mills.

Commercial Class.

NAMES.	RESIDENCE.	
P. A. Adams,	Madison,	Wisconsin.
W. P. Atwell,	Madison,	Wisconsin.
Wm. H. Askew,	Madison,	Wisconsin.
George Bartell,	Madison,	Wisconsin.
M. L. Bradley,	Madison,	Wisconsin.
H. W. Brandon,	Jefferson,	Wisconsin.
James R. Birge,	Whitewater,	Wisconsin.
Ira W. Bird,	Madison,	Wisconsin.
Wm. Booth,	Madison,	Wisconsin.
Miss Eugenia Chapman,	Madison,	Wisconsin.
Miss Eliza Coan,	Middleton,	Wisconsin.
Jorome Clark,	Madison,	Wisconsin.
John M. Dale,	Mineral Point,	Wisconsin.
Edgerton Dale,	Mineral Point,	Wisconsin.
M. C. Dunkelberg,	Pekin,	Illinois.
Wm. Filkins,	Madison,	Wisconsin.
Henry L. Gray,	Madison,	Wisconsin.
Perry Grace,	Madison,	Wisconsin.
Alexander Gill,	Aultsville,	Canada West.
E. D. Griswold,	Madison,	Wisconsin.
L. E. Guild,	Madison,	Wisconsin.
B. T. Harris,	Madison,	Wisconsin.
John C. Henry,	Madison,	Wisconsin.
Andrew Jackson,	Madison,	Wisconsin.
James Karns,	Madison,	Wisconsin.
Clarence Kellogg,	Madison,	Wisconsin.
Conrnd Kreuz,	Madison,	Wisconsin.
John Kleyter	Madison,	Wisconsin.
A. Jackson Krum,	Madison,	Wisconsin.
Frederick La Roque,	Madison,	Wisconsin.
A. J. McFarlane,	Portage,	Wisconsin.
George W. Moss,	Pierceville,	Wisconsin.
Arthur Mills,	Madison,	Wisconsin.
Edward Noyes,	Madison,	Wisconsin.
Charles Powers,	Palmyra,	Wisconsin.
John Reynolds,	Madison,	Wisconsin.
D. W. Sanford,	Middleton,	Wisconsin.
Henry Starks,	Madison,	Wisconsin.
Edward E. Sheldon,	Aztalan,	Wisconsin.
Wm. E. Spencer,	Madison,	Wisconsin.
Hugh Spencer,	Madison,	Wisconsin.

William Stevenson,	**Madison,**	**Wisconsin.**
Geo. W. Smith,	Madison,	**Wisconsin.**
John Stock,	Madison,	**Wisconsin.**
Geo. W. Stoner,	Madison,	**Wisconsin.**
Stephen Timlin,	Dellona,	Wisconsin.
H. Vandervort,	Cottage Grove,	Wisconsin.
Henry Vilas,	**Madison,**	Wisconsin.
Geo. W. Vroman,	Stoner's Prairie,	Wisconsin.
W. C. Waldo,	Jefferson,	Wisconsin.
Wm. A. Wheeler,	Pheasant Branch,	Wisconsin.
E. T. Williams,	Madison,	Wisconsin.
William Worthington,	Madison,	Wisconsin.

SUMMARY.

Classical Course,	29
Scientific Course,	39
Preparatory Department,	61
Total Literary Department,	129
Commercial Department,	53

CIRCULAR OF THE UNIVERSITY OF WISCONSIN.

Subjects of Instruction.

CLASSICAL COURSE.

FIRST YEAR.

FIRST TERM.—*Mathematics*—Algebra, Loomis'.
Latin—Livy, Lincoln's.
Greek—Xenophon's Anabasis.
History—United States.

SECOND TERM.—*Mathematics*—Algebra completed—Solid and Spherical Geometry, Loomis': Plane Trigonometry.
Latin—Livy continued.
Greek—Yenophon's Memorabilia.
History—General.

THIRD TERM.—*Mathematics*—Mensuration, Surveying, Navigation, use of Instruments, Spherical Trigonometry.
Latin—The Odes of Horace.
Greek—Xenophon's Memorabilia continued.
English Language.

SECOND YEAR.

FIRST TERM.—*Mathematics*—Analytical Geometry, Smith's.
Latin—Horace—Satires.
Greek—Homer—Iliad, Owen's.
French—Fasquelle's Course.
SECOND TERM.—*Mathematics*—Differential and Integral Calculus, Smith's
Latin—Horace—Epistles.
Greek—Homer or Æschylus, Prometheus.
French—Robertson's Method.
THIRD TERM.—*Mathematics*—Applications of the Calculus.
Natural Philosophy—Somatology, Lectures, Mechanics, Snell's Olmsted.
Latin—Horace finished.
Greek—Homer or Sophocles.
French—Reading from Chapsal's Lecons et Models de Literature.

THIRD YEAR.

FIRST TERM.—*Natural Philosophy*—Mechanics, Hydrostatics, Pneumatics, &c., Snell's Olmsted.
Latin—Tacitus—Germania and Agricola.
Greek—Demosthenes—DeCorona, or Thucydides.
Rhetoric—
English Literature—
SECOND TERM.—*Natural Philosophy* completed.
Astronomy—Snell's Olmsted.
Latin—Tacitus or Juvenal.
Greek—Demosthenes, Thucydides, or the Clouds of Aristophanes.
Mental Philosophy—Intellectual Powers.
THIRD TERM.—*Astronomy*—Snell's Olmsted.
Latin—Juvenal and Persius.
Greek—Æschylus.
Mental Philosophy—Active Powers.
Logic—

FOURTH YEAR.

FIRST TERM.—*Ethics*—Haven.
Christian Evidences—Lectures.
International Law—Kent.
History of Philosophy—Lectures.
Chemical Philosophy—Lectures.
German—Ahn's Method.
SECOND TERM.—*Civil Polity.*
Constitutional Law—
Chemistry—The Metals—Organic—Lectures.
German—Tiark's Grammar, Translations from English into German.

THIRD TERM.—*Political Economy*—Say's.
Geology—Lectures.
Botany—Lectures.
Physiology.—Lectures.
German.—Translations into German and select readings.

The SCIENTIFIC COURSE is the same as the Classical, omitting the *Ancient Languages*. Most of those, however, who pursue this course, tak Latin, which is earnestly recommended.

Each student is expected to attend three recitations or lectures daily. There are also frequent exercises in Declamation and Composition.

The foregoing subjects of study are arranged under the following heads, each one of which is placed under the charge of a Professor, who is responsible for the progress and attainments of the students therein:

ETHICAL AND POLITICAL SCIENCE.

[Chair vacant.—Instruction given by Prof. Read.]

The instructions of this chair are rendered in course, to subgraduates of the fourth year, and to such other students of the University as elect to attend. The subjects of instruction are eminently adapted to prepare the student to become a good and useful citizen of the Republic, and to fit him for civil service in the same. The course occupies a year, one exercise each day, as follows:

ETHICS—Moral Obligation; Development of Moral Law; Sanctions of Moral Law; Practical application of the Science.

The text book, Wayland's Elements of Moral Science, is used, merely as suggesting a convenient series of topics for oral lecture, and for familiar discussion in class.

CIVIL POLITY—Political Ethics; Science of Government; The American Constitution; International Law; History of Civilization.

This class of subjects is taught wholly by lecture, with intermediate examination and discussion. The student is required to write out his views on each topic, and at stated periods, to read his results before the class.

POLITICAL ECONOMY—Production of Material Wealth; Distribution; Exchange and consumption: Applications of the Science; Relations to Civilization.

The discussion of this subject in class, is in the order of topics suggested by Say in his Treatise on the Production and Consumption of Wealth.

MENTAL PHILOSOPHY, LOGIC, RHETORIC, AND LITERATURE.

DANIEL READ, LL. D., *Professor*.

The instructions of this chair are rendered to subgraduates of the first, third and fourth years. An *extra* course on English Literature will be given annually to students not of the regular classes.

The course of instruction in *Intellectual Philosophy*, embraces an analysis of the powers of the human mind, *active* and *moral*, as well as those denominated *intellectual*, the examination of those powers in reference to criticism, to teaching, to the improvement of the individual, and the progress of society. It includes, also, a critical review of the systems of philosophy, which have prevailed among men.

Logic is taught as to its principles and application; an outline of the laws of evidence and human belief is given; and in connection with this part of the subject, the evidences of Christianity are examined.

Rhetoric, so far as it relates to the subject of *invention* and *disposition*, is taught by lectures, upon the basis of Quintilian and Cicero; and as regards *style* and *criticism*, upon that of modern writers.

In the course of English Literature are included the history of the English language, an examination of its elements, powers and grammar, and the history of English Literature in its various departments.

In *history*, Webber's outlines will be used as a text-book, and a course of lectures will be given on the civil history of the United States.

The course in this department for the term beginning December 10th, will be the following:

I. MENTAL PHILOSOPHY—Embracing analysis of the faculties of the human mind, *active* and *moral*, as well as those denominated *intellectual*: examinations of these powers in reference to criticism, to teaching, to the improvement of the individual and the progress of society.

The course embraces a critical review of the systems of Philosophy which have prevailed among men.

The instruction of the department is conducted by means of text-books (Haven) and lectures. The student is required to give orally or upon the blackboard, an analysis of every subject, as well as to prepare carefully written abstracts and dissertations upon assigned topics. Hour from 10—11 A. M.

II.—CLASS IN ENGLISH—History of English Language; its composition, grammar, structure of sentences, punctuation. History of the progress of English Literature in its various departments. Hour 11—12 A. M.

III.—SPEAKING AND COMPOSITION—All students required to engage in these exercises. 3 P. M.

MATHEMATICS AND NATURAL PHILOSOPHY.

J. W. STERLING, A. M., *Professor*.

COURSE OF STUDY.

First Year.

Terms.
1. Algebra—Loomiss.
2. Algebra completed—Solid and Spherical Geometry—Plane Trigonomety.
3. Applications of Trigonometry to Surveying, &c., and use of instruments—Spherical Trigonometry.

Second Year.

Terms.
1. Analytical Geometry—Smith's.
2. Differential and Integral Calculus—Smith's.
3. Applications of the Calculus, Mechanical Philosophy—Snell's Olmsted—Lectures.

Third Year.

Terms.
1. Natural Philosophy—(Snell's Olmsted.) Lectures on General Physics.
2. Natural Philosophy, &c., continued.
3. Astronomy—Snell's Olmsted—Loomis.

For admission to this course, candidates will, in future, be required to have a thorough knowledge of Arithmetic, Mental and Written ; The Elements of Algebra, (Ray's) and Plane Geometry, (Loomis's.) In this department there is one exercise daily for three years.

To secure thoroughness there will be frequent reviews, and written examinations on the subjects passed over.

On the various subjects of General Physics or Natural Philosophy, there will be weekly, extending throughout the year, at least two lectures accompanied by experimental illustrations. All who choose are permitted to attend these exercises.

Each regular member is expected to take notes of the lectures, and is frequently required to lecture on subjects previously discussed by the professor, repeating the experiments. This exercise is deemed important to cultivate in the student the habit of investigation and facility in communicating his knowledge.

Books of Reference in Natural Philosophy.—Loomis, Lardner, Silliman, Olmsted, Arnott, Muller, Library of Useful Knowledge, Brewster. (Optics) Herschell, (Light and Sound,) Jackson, (Optics).

CHEMISTRY, NATURAL HISTORY AND THEIR APPLICATIONS.

Ezra S. Carr, A. M., M. D., *Professor.*

The instruction in this department is given by lectures and demonstrations on the part of the professor and students, together with examinations.

The recitation of the student consists in his giving a lecture, illustrated with experiments and demonstrations on the same subject and after the manner of the Professor, thus not only necessarily acquiring an intimate knowledge of the subject discussed. but at the same time the faculty of communicating his knowledge.

The subjects discussed embrace a full illustration of all the topics of theoretical or practical importance, and their applications to the useful arts, the processes of common life, Agriculture, Philosophy, &c.

Fall Term.

Chemical Philosophy, Chemistry of the Non Metallic Elements, Fuel, Heating, Lighting, Ventilation, &c.

Winter Term.

Chemistry of the Metals and Metallurgy, Organic Chemistry, including the Chemistry of Animal and Vegetable Life, the Preparation, Preservation Uses of food, &c.

Spring and Summer Term.

Botany.—The Plant being first considered as an individual in reference to the nature and processes of vegetable life; Second, its relation to other plants, or the Vegetable Kingdom; Third, its uses.

Geology.—Considered especially in relation to the uses of rocks, and their relations to useful minerals.

Text Books.

Chemistry.—Silliman, Regnault, Gmelin, Johnston's Chemistry of Common Life, Townsend's Hand Book of Household Science, Knapp's Technology.

Botany.—Wood, Gray's Works, Lindley's, Vegetable Kingdom.

Geology.—Hitchcock's Lyell, Delabeche, Geological Reports of the different States.

ANCIENT LANGUAGES AND LITERATURE.

James D. Butler, LL. D., *Professor.*

COURSE OF STUDY.

FIRST YEAR.

Latin.

Terms.
1. Livy.
2. Livy, continued.
3. Horace—Odes.

Greek.

Terms.
1. Xenophon—Anabasis, or Cyropœdia.
2. Xenophon—Memorabilia.
3. do do

SECOND YEAR.

Latin.

Terms.
1. Horace—Satires—Prose Composition.
2. Horace—Epistles— do
3. Horace—Completed— do

Greek.

Homer, Iliad. or Odyssey, Owen's ed. through the year.

THIRD YEAR.

Latin.

Terms.
1. Tacitus, History or Annals.
2. Tacitus, or Juvenal.
3. Juvenal and Persius.

Greek.

Terms. 1. Demosthenes de Corona, or Thucydides.
2. do do do
3. Plato or Æschylus.

The grammars used, are Crosby for Greek, and Andrews' (Revised Ed.) for Latin. For all but the most advanced students, the new Latin Dictionary by Crooks and Schem is recommended as by far the best.

Classical Geography will be illustrated by Kiepert's mural maps, the whole series of which hangs in the class-room. The light always radiating from words upon things, as on religion, art, philosophy, nationality, and the whole manner of ancient life, will be daily traced. No pains will be spared to make the classical languages elucidate our own vernacular. Throughout the curriculum, the study will be an exercise, not of mere verbal memory, but of philosophical memory, of discrimination, of rendering reasons, and of research concerning things, no less than words.

The time needful for completing this course will vary with the diligence and previous attainments of students.

Among the reference books which it is desirable that philological students should have on their tables—in addition to the grammars of Crosby for Greek, and Andrews for Latin, and Liddel and Scott for Greek, may be mentioned:

Rich's Companion to the Latin Dictionary and Greek Lexicon.

Smith's Dictionary of Greek and Roman Geography, Biography, Mythology and Antiquities—6 vols. 8vo., or Anthon's abridgments.

Doederlein's Latin Synonymes.

Finlay's Classical Atlas.

Becker's Gallus and Charicles.

Gradum ad Parnassum, Piper's Ed.

MODERN LANGUAGES AND LITERATURE.

J. P. Fuchs, M. D., *Professor.*

a.—GERMAN.

1. *Class of Beginners.*

First Term—Elements of the German Language, after Ahn's Method.

Second Term.—Tiark's Grammar. Translations from English into German. Woodbury's Reader.

Third Term.—Translations into German. Select readings from German Prose writers and Poets.

2. *Advanced Class.*

German Composition. Exercises in German Conversation. Readings from Gœthe's or Schiller's works. Synopsis of the German Literature.

b.—FRENCH.

First Term.—Fasquelle's Course.

Second Term.—Robertson's Method.

Third Term.—Reading from Chapsal's Lecons et Models de Litterature.

BOOK-KEEPING AND COMMERCIAL CALCULATIONS.

DAVID H. TULLIS, *Instructor.*

This School was for two years in successful operation in the city of Madison under the denomination of "Bacon's Commercial College." It is now a part of the University, and will soon be transferred to the rooms designed for it in the main edifice. At present rooms are occupied in Klauber's new block. The course of study consists of

1st. Single and Double Entry Book-Keeping, embracing the various departments of Trade and Mercantile accounts, viz: Wholesale and Retail, Stock and Partnership Books, Shipping, Steamboating, Railroading, Banking, Manufacturing, Commission, Joint Stock and Company Business.

2d. Commercial Calculations, comprising the system of calculations appertaining to Percentage, Equation of Payments, Compound Equations, Exchange, (Domestic and Foreign,) Arbitration of Exchange, General Average, Arbitration of Merchandise, Tonnage of Vessels, Storage, and Custom House Transactions.

3d. Business Penmanship.

4. Commercial Forms and Correspondence, including Forms of Invoices, Accounts current, Account Sales, Bills of Lading, Promissory Notes, Orders, Checks, Drafts, Bills of Exchange, Articles of Copartnership, and Business Letters.

5. Lectures on Customs of Merchants, Rules of Trade, Commercial Law, Political Economy, &c., &c.

It is the purpose of the Board of Regents in the establishment of this Instructorship, to afford the student an ample opportunity to qualify himself for prosecuting the Mercantile Profession in any Department, and to any extent.

Students are taught separately, and not in classes, and can enter at any time they choose.

PREPARATORY DEPARTMENT.

Experience in this University, as in our western universities generally, has demonstrated the necessity of provision for instruction in branches which are properly preparatory to the different university courses. Young men of mature age often come to the University for instruction in some of its appropriate subjects, who wish also to perfect themselves in more elementary branches. To close the doors of the University upon this class of young men, or not to afford them the facilities of instruction which they need, would be greatly to limit the sphere of its usefulness as a State Institution.

Provision is therefore made for full preparatory instruction, at the University buildings. This instruction, under the direction and supervision of the Faculty, will be rendered by a competent Tutor. Those wishing preparation for the regular classes, merely a business education, or improvement in preparatory studies, with reference to teaching, will find within the University, instruction adapted to their especial wants.

Students, of a suitable age, in this department, are allowed to occupy rooms in the University buildings.

TERMS OF ADMISSION.

Candidates for admission to the first year of the *Classical Course*, must pass a satisfactory examination in the common branches, the elements of Algebra (Ray's,) Plane Geometry (Loomis',) Latin Reader, Cæsar or Cornelius Nepos, Virgil's Æneid, (six books—the edition of Frieze is preferred as far the best,) Crosby's Greek Lessons, and the Anabasis of Xenophon.

Instead of these particular works in Latin and Greek, any equivalent will be accepted.

For admission to the first year of the *Scientific Course*, the requirement is the same as for the Classical Course, omitting the ancient languages.

Candidates for advanced standing are also examined in the studies to which the class they propose to enter have attended.

Such as desire to pursue a *Select Course* will be admitted to any of the recitations for which they may be prepared.

Applicants for admission must present testimonials of good moral character. Students are received from other states.

Each term is closed by a public examination of all the classes, at which every member of each class is required to be present. At the close of the year, the members of the regular classes will be examined in all the studies pursued during the year; and none will be allowed to advance whose examinations are not satisfactory.

These examinations will be both oral and written, and such as to furnish a thorough test of the student's acquirements.

DEGREES.

Those who have satisfactorily completed the Classical Course are entitled to the Degree of *Bachelor of Arts*.

Those who have satisfactorily completed the Scientific Course are entitled to the Degree of *Bachelor of Philosophy*.

MERIT ROLL.

A permanent record is kept of the daily attendance, conduct and recitations of each student; and information of his standing communicated from time to time to his parent or guardian.

RELIGIOUS EXERCISES.

The students are assembled at prayers daily in the chapel of the University, fifteen minutes before the morning hour for commencing study and recitation.

ACCOMMODATIONS.

University Hall, costing more than $60,000, has just been completed. This building contains commodious public rooms for recitation, lecture, library, cabinets, literary societies, &c. There are also two large buildings provided with pleasant study and lodging rooms for students, and apartments for boarding clubs, &c. These buildings are warmed in the winter by furnaces in the basement.

ROOMS, &c.

Private rooms in the University, under certain restrictions and conditions, can be secured by application to the locating officer.

No student will be allowed to occupy a room until his bills for the term are settled.

Students in the regular University classes, in previous occupancy, will be allowed to retain their rooms, if on the ground at the opening of the term.

Students from abroad, admitted to the University classes, and intending to complete the Classical or Scientific course, will be permitted first to draw, by lot, for vacant rooms.

Rooms are furnished at the expense of the students, who should bring their own bedding, towels, &c.; other furniture can be obtained here second-hand, or new, at moderate prices.

Occupants of rooms are held responsible for all damages to the same.

Students not accommodated in the University, and not residing with their parents in Madison, will lodge and board in town, under such regulations as the Faculty may prescribe.

Students of suitable age in the Preparatory and Commercial Departments are allowed to occupy dormitories in the University Building.

Vacant rooms are assigned by lot on the first day of the term at 2 o'clock, P. M.

LIBRARY, CABINETS, &c.

The University Library, with those of the Literary Societies, comprises about four thousand volumes.

The institution is provided with valuable Geological and Mineralogical Cabinets and collections in Natural History; also with well selected Philosophical and Chemical Apparatus.

TERMS AND VACATIONS.

The COMMENCEMENT ANNIVERSARY is on the *last Wednesday of June*, and is followed by a vacation of *nine* weeks.

There are *three terms* of thirteen weeks each in the year; and three vacations, one of nine, and the others of two weeks each.

The *first term* therefore opens on Wednesday, nine weeks from Commencement; and each of the other terms on Wednesday, two weeks from the close of the preceding term.

CALENDAR FOR 1862-3.

FIRST TERM commences Aug. 27th, 1862, and closes Nov. 26th, 1862.

SECOND TERM commences Dec. 10th, 1862, and closes March 11th, 1863.

THIRD TERM commences March 25th, 1863, and closes June 24th, 1863.

FIRST TERM commences Aug 26th, 1863, and closes Nov. 24th, 1863.

COMMENCEMENT ANNIVERSARY, Wednesday, June 24th, 1863.

EXPENSES.

University charge (for tuition, room and heat) per term	$10 50
Tuition, without private room, per term	5 00
" for less than a whole term, per week	50
Room-rent and fuel, for less than a term, per week	55
Commercial course, time unlimited, in advance	25 00
Board in University building, or in private families, from $1 75 to $2, per week	1 75
Washing, per doz	50

No deduction, from university charges, will be made for absence during the last two weeks of the term, except in case of sickness

Students are furnished with board in the family of Prof. Sterling, who resides in one of the University buildings.

Many students board themselves in their rooms for less than $1 per week.

Payment of University charges is required strictly *in advance*.

There are no extra charges except for actual damages by students.

It is the object of the University to afford the youth of the state the best education, both Scientific and Practical, and at the lowest rates.

At no similar institution in the land are the expenses of education less than in the University of Wisconsin.

The location of the Institution, it is well known, is among the most beautiful and healthful any where to be found.

Communications addressed to the undersigned will receive prompt attention.

J. W. STERLING, *Dean of the Faculty.*

THE ALUMNI ASSOCIATION.

No where do men in the midst of life turn more fondly than to the scenes of their early studies, or the forge of their minds; and with no associates of after years are their hearts more knit together than with those side by side with whom they have served through literary campaigns. Hence, none of our older collegiate institutions is without a society composed of those who have run through its curriculum and been decorated with its honors. As the University was summer before last sending forth its eighth class of graduates, it seemed to those of her sons then present that it was already high time to cluster her scattered children into a brotherhood.

Accordingly, on the evening of commencement day, June 26th, 1861, a meeting was called; an ALUMNI ASSOCIATION organized; and the following officers were elected.

C. T. Wakeley, President, J. F. Smith, Vice President.
J. M. Flower, Cor. Secretary, W. F. Vilas, Recording Secretary.
T. D. Coryell, Treasurer.

Sidney Foote, S. W. Botkin, H. Vilas, Executive Committee.

It was also voted that the association should be annually addressed by an orator and a poet, in connection with the commencement exercises.

At the commencement of 1862 an oration was delivered before the association by C. T. Wakeley, Esq., one of the two first graduates of the institution, and a poem by R. W. Hubbell, of the class of 1858.

It is confidently hoped that this new organization, and the new feature in the commencement anniversary, will make that occasion more than ever a rallying point for all the alumni, and will redouble their interest in their Alma Mater, as well as in one another.

ANNUAL REPORT

OF THE

BOARD OF REGENTS

OF

The University of Wisconsin,

FOR THE

Fiscal Year Ending September 30, 1863.

* * *

MADISON, WIS.:
WILLIAM J. PARK, STATE PRINTER, HARDING'S BLOCK.
1863.

ANNUAL REPORT

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OF THE

Board of Regents of the University of Wisconsin,

FOR THE

Fiscal Year ending September 30th, 1863.

MADISON, November 23, 1863.

To His Excellency, EDWARD SALOMON,
Governor of Wisconsin:

SIR—I have the honor to transmit through you to the Legislature, the Sixteenth Annual Report of the Board of Regents of the University of Wisconsin.

Very respectfully,
Your obedient servant,
J. L. PICKARD,
President pro tem., Regents.

To the Legislature of the State of Wisconsin:

The Board of Regents of the University of Wisconsin respectfully submit their report for the year ending September 30, 1863.

I.—INTERNAL CONDITION OF THE UNIVERSITY.

At the commencement of the year the only department of the University which was organized and in operation, was that which is denominated in the organic act the "Department of Science, Literature and the Arts." Two courses of study for students of college grade are provided for in this department. One of these, called the "Classical Course," is identical with the ordinary regular curriculum of the American college. The other, which is denominated the "Scientific Course," includes the English studies of the former, together with the French and German languages. Graduates of the former course receive the degree of Bachelor of Arts; those of the second, the degree of Bachelor of Philosophy. A Preparatory School has also been maintained in connection with this department, designed to furnish especially the mathematical and classical training required for admission to the college classes. There has also been connected with this department a Commercial School, designed " to afford the student an opportunity to qualify himself for prosecuting the mercantile profession " by furnishing him a course of professional instruction " as extensive and thorough as that of the best Commercial Colleges in the country."

Before the beginning of the second or Spring term, the Board, with the cordial co-operation of the Faculty, had made provision for opening the second department defined in the organic act, to wit.: that of "The Theory and Practice of Elementary Instruction." This is, of course, only another name for what is commonly known in this country as a Normal School. Professor Charles H. Allen, formerly the general agent of the Board of Regents of Normal Schools in this state, and an instructor of established reputation in that specialty, was placed at the head of this department. The South Dormitory, except so much of it as is occupied by the Dean of the Faculty and his family, was devoted to the use of the young ladies who should become members of the Normal School; and provision was made in it for a public dining hall, under the supervision of Professor Allen. Public rooms for the use of this school were also fitted up in one of the wings of University Hall.

Since the organization of the Normal Department, the instructional force of the University has consisted of six professors, a tutor of the Preparatory School, an instructor of the Commercial School, and a preceptress in the Normal School.

The whole number of different students who received instruction in the University during the year under review, exclusive of the Commercial School, was 347. The number connected with the Commercial School was 57. As the instructions of this school are not given by terms, its members are not included in the following statistics relative to the several terms.

The number of students in the college classes during the first or Winter term was twenty-nine; of whom twelve were upon the "Classical Course," and seventeen upon the "Scientific Course;" there were also thirty-four students in the Preparatory School; making a total of sixty-three.

During the Spring term the whole number of students was one hundred and seventy-seven; one hundred and one of whom were gentlemen, and seventy-six ladies. Of these, thirty-five were in the college classes, fifteen being engaged upon the classical course, and twenty upon the scientific; thirty were preparatory students, and one hundred and twelve members of the Normal School. During the Fall term there were in attendance one hundred and ten gentlemen, and one hundred and nineteen ladies, making a total of two hundred and twenty-nine. Of these, thirty-five were college students—thirteen upon the classical, and twenty-two upon the scientific course; thirty-two were preparatory students, and one hundred and sixty-two normal students.

It appears from statements of the Faculty, and is worthy of special remark, that nearly all of those who are enumerated as upon the Scientific course of study, take in addition either the whole or a large part of the regular curriculum in the Latin language and literature. The numbers above given, therefore, do not fairly represent the real strength of the " Classical " element in the institution.

The war, which has called away from the state so large a proportion of our enterprising young men, who, if at home, would be found in seminaries of learning, has continued to affect unfavorably the attendance upon the college courses of study. When the final triumph of the government and the conclusive suppression of rebellion shall again give peace to the country, there is reason to believe that multitudes of young men now in the army will be found seeking the benefits of a liberal education. It will be the duty and the aim of the Board, in the mean time, to place and keep the University in such a condition as will enable it to do its part of the work which will then devolve upon the higher institutions of learning.

For more detailed information in reference to the faculty, students, courses of study, methods of instruction and discipline of the University, reference is made to Appendix C.

II.—MEETINGS OF THE BOARD.

The Board of Regents has held two meetings during the year. The Winter meeting was held on the 21st and 22d of January. The following members were present: Regents Conover, Davis, Frank, Lewis, Pickard, Salomon, Tenney, and Vilas. A communication was received from the faculty, relative to the establishment of a Normal Department, and also a report from the executive committee on the same subject. The recommendations of the committee were approved by the Board, and they were authorized to establish such a department. The committee were also authorized to have the Geological Cabinet and Museum of Natural History removed from the south dormitory building to the rooms designed for their permanent location in University Hall, and an appropriation was made for that object.

The Summer meeting was held on the 23d and 24th of June. There were present Regents Conover, Davis, Dewey, Eastman, Lewis, Pickard, Salomon, Vilas, and Worthington.

The Executive Committee made a full report of their action since the previous meeting of the Board. The most important item was the organization and opening of the Normal Department.

The degree of Bachelor of Arts was conferred on MILTON S. GRISWOLD and LEVI M. VILAS; that of Bachelor of Philosophy upon PITT CRAVATH and FRANK WATERMAN; that of Master of Arts upon GEORGE W. BIRD, THOMAS J. HALE, WILLIAM P. POWERS, LEANDER M. COMINS, JOHN B. PARKINSON and FREDERICK T. STARKWEATHER.

The following officers and standing committees were elected: Secretary, D. H. Tullis; Treasurer, Timothy Brown; Librarian, Prof. J. W. Sterling; Executive Committee, Regents Pickard, Vilas, Worthington, Lewis, Conover; Library Committee, Regents Conover, Eastman and Worthington.

The regular annual report of the several professors upon the work of the year and the condition and wants of their respective chairs, were received, read and ordered to be entered of record.

The salaries of the professors, payable from the University Fund Income, were fixed at $ 900 per annum from the 1st of April last.

The Executive Committee were authorized to make arrangements for continuing the Preparatory School; and also to re-adjust fees in the several departments; and were directed to collect and cause to be printed all the Rules, By-Laws and Ordinances of the Board, and report the same to the next meeting, with such amendments as they might think proper to recommend for the approval of the Board.

The Executive Committee reported progress in fitting up rooms in University Hall for the Cabinet and Museum; and an additional appropriation was made for that purpose.

A committee consisting of Messrs. Vilas, Dewey and Eastman appointed to report upon the subject of the payment of mileage and *per diem* to Regents, reported the following resolution, which was adopted: Resolved, that the resolution of this Board passed on the 21st day of January, 1857, authorizing the payment of mileage and *per diem* to Regents not residing in Madison, be, and the same is hereby repealed.

The above are the most important items of business transacted at the meetings of the Board. In the interim between its meetings, the business affairs of the Board are managed by the Executive Committee, who are charged with carrying out its expressed wishes and seeing that the institution receives no detriment. It appears from the records of the committee that they have held fourteen meetings during the past year.

III.—FINANCIAL STATEMENT.

The receipts of the University Fund Income, after deducting the amount refunded, as appears from the books in the office of the Secretary of State, were		$ 12,519 97
The charges made by the state were as follows:		
For clerk hire in office of Secretary of State,	$ 800 00	
For printing,	42 52	
For protecting lands,	25 00	
Total state charges,		$ 867 52
Net receipts payable to University Treasury,		$ 11,652 45
Transferred from other funds,		29 80
Balance in State Treasury, September 30th, 1862,		2,530 01
		$14,212 85
Overpaid University Treasury, September 30, 1863,		57 18
		$14,269 48

The receipts into the University treasury, from the income of the University Fund, during the fiscal year were		$14,269 48
The expenditures were as follows:		
Salaries of Professors and Tutor,	$5,700 00	
Salary of Secretary,	100 00	
do Janitor,	300 00	
Interest on Loans,	2,213 73	
do Construction Warrants,	1,174 95	
Insurance,	406 25	
Wood,	748 12	
Miscellaneous,	845 47	
Total,	$11,488 52	
Overdrawn September 30, 1862,	84 67	
Balance September 30, 1863,	2,696 29	
		$14,269 48

For a more detailed statement of expenditures, see the annual report of the Treasurer, (Appendix A,) and that of the Secretary, (Appendix B.)

The salaries of the six professors are now fixed at $900 per annum, payable from the University Fund Income; and the tutor receives from the same source a salary of $500 per annum. The instructor of the commercial school is remunerated solely by the separate fees paid in that school. From the other fees paid by students, a thousand dollars are deducted to pay the salary of the preceptress of the Normal School, and to meet certain other expenses of that department; the remainder of the fees is divided equally among the professors. The total amount of their remuneration thus varies with the number of students. During the past year it has been about $1,400 for each.

The following is an estimate of receipts and expenditures for the current fiscal year:

Estimated receipts of the University Fund Income, less the state charges,		$11,000 00
Salaries of six Professors,	$ 5,400 00	
Salary of Tutor,	500 00	
Salary of Secretary,	100 00	
Salary of Janitor,	800 00	
Interest on loans,	1,680 00	
Insurance,	406 25	
Wood,	1,000 00	
Miscellaneous,	1,000 00	
		10,886 25

Should no additional instructor be appointed, and no extraordinary or unforeseen charges be incurred, the probable current receipts of the year will therefore meet its current expenses, and the amount of $2,696, remaining as a balance at the end of the last fiscal year, will continue untouched, or may be devoted to the payment of the fixed indebtedness.

The condition of the University Fund on the 30th of September, 1863, as shown by the books in the office of the Commissioners of School and University Lands, was as follows:

Amount due on certificates of sale of University Land,	$160,408 53
Amount due on loans,	22,707 00
	$182,110 53
Cash in State Treasury,	884 17
	$183,944 70

The fixed indebtedness of the University on the same day was as follows:

Due the School Fund,	$19,000 00
Due J. D. Ledyard,	5,000 00
Total,	$24,000 00
Net resources,	$159,944 70

Should the interest be paid on the whole amount due on loans and certificates as above stated, during the current year, the income for that period will be $12,747 74, subject to a deduction for state charges similar to those above noticed, of between $800 and $1,000. It is to be expected, however, that forfeitures will occur as in former years, which will reduce the actual income below this estimate.

The indebtedness of the University on the 30th of September, 1862, as stated in the last report of the Board, was $47,416 27. A comparison of this amount with that of the indebtedness at the close of the year under review, will show that the diminution of the fixed indebtedness during the year was $23,416 27. It is hoped that the close of the current year will find the institution almost free from debt.

From a report made to the Legislature by the Commissioners of School and University Lands, February 24, 1862, it appears that the whole amount of land granted by the general government to the State in trust for the establishment of a University, was 92,607.31 acres; and that of this amount there was,

Patented,	11,093.81 acres.
Held on valid certificates,	42,715.44 acres.
On hand, (including forfeited lands,)	38,798.06 acres.

From a report made to the Board in July, 1860, by a committee of its own members, it appears that there then remained of the original endowment 17,682.70 acres which had never been sold. The regular sales since that date have been very limited, and we estimate the amount still remaining unsold at about 16,500 acres. By the politeness of the Chief Clerk in the land office, we are furnished with the following figures relative to the University lands:

No. of acres of forfeited lands on hand September 30. 1863,	23,426. 07
Amount due on same,	$60,501 90
No. of acres of forfeited lands advertised in 1863,	2,707. 07

By a comparison of the above statements it will be seen that the whole amount of lands belonging to the University, now on hand, including both those which have never been sold and those which have been forfeited and not resold, is about 40,000 acres. With wise and conscientious management this remaining portion of the endowment may doubtless be made to add largely to the now slender available means of the institution.

We again invite the attention of the legislature to the question, whether it would not better accord with the character of a great State, to administer the bounty bestowed by the Federal Government for the establishment of a State University without charging the fund with the expense of its management. So far as the other trust funds administered by the State for its own benefit are concerned, a similar question need not be raised, because so far as these fail to produce a net income sufficient for their several objects, the deficiency must in any event be made good by taxation. But in the case of the University Fund, every dollar withdrawn from the income to pay the state charges, is, under the present system, finally and totally lost to the uses for which the endowment was granted. The institution which you have placed under our care, greatly needs annual additions to its slender library and to its means of illustration and experiment in the several departments of natural science; it greatly needs a Chancellor; it greatly needs an additional instructor for the special uses of the Normal School, through which we are striving to make it subserve, in the most direct and practical manner, the great cause of popular education. A remission of the annual state charges, while it would not provide for all these wants, would be of sensible value in providing for some of them. If the Legislature chose to remit them upon condition that the amount should be applied to some specific object, which to your honorable body might seem most important, the Board would willingly make such application.

The University of our sister state of Michigan, (which has had only half as large an endowment of land from the Federal Government as our own,) by its annual income of about $40,000, by its annual attendance of between six and seven hundred students in the several departments, and by its reputation at home and abroad as a seat of learning, furnishes a shining refutation as well of the idea that such a trust cannot safely be committed to the honor and justice of a State government, as of the other idea, which too often finds careless or interested currency, that an institution for the higher learning, forming a part of the organized agencies of the State government, cannot attain the highest degree of excellence and success.

In behalf of the Board,

J. L. PICKARD,
D. WORTHINGTON,
O. M. CONOVER,
Committee.

APPENDIX.—" A."

To the Regents of the University of Wisconsin:

As your Treasurer I respectfully submit my annual report, containing a detailed statement of the receipts and disbursements during the fiscal year, commencing on the first day of October, A. D. 1862, and ending September 30th, A. D. 1863, from which it appears that the receipts were $39,769 48, and disbursements $37,157 41, leaving in the Treasury $2,612 07.

TIMOTHY BROWN,
Treasurer of University of Wis.

MADISON, October 1st, 1863.

Detailed Report of Receipts and Disbursements by the Treasurer of the University of Wisconsin, from the 1st day of October, A. D. 1862, *to the 30th day of September, A. D.* 1863, *inclusive.*

RECEIPTS.

Date.		From what source.	Amount.	Total.
1862.				
Oct.	30	Received from State Treasurer, Principal Fund,...	$1,500 00	....
...	30	........do..................do...........Income......do......	1,000 00	....
Dec.	13	........do..................do..............do.........do......	1,500 00	....
...	18	........do..................do...........Principal ...do......	2,500 00	....
1863.				
Jan.	14	........do..................do...........Income......do......	500 00	....
...	14	........do..................do...........Principal ...do......	4,000 00	....
Feb.	16	........do..................do...........Income......do......	1.000 00	....
...	16	........do..................do...........Principal...do......	3,000 00	....
Mar.	30	........do..................do..............do........do......	2,500 00	....
...	30	........do..................do...........Income......do......	1,500 00	....
Apr.	18	........do..................do...........Principal ...do......	1,000 00	....
...	18	........do..................do..............do........do......	5,000 00	....
...	18	........do..................do...........Income......do......	104 76	....
May	21	........do..................do...........Principal ...do......	2,000 00	....
...	21	........do..................do...........Income......do......	54 72	....
June	5	........do..................do..............do ... .do......	1,610 00	....
...	22	........do..................do..............do ....do......	4,500 00	....
...	22	........do..................do...........Principal ...do......	2,000 00	....
July	25	........do..................do..............do ....do......	2,000 00	....
Sep.	24	........do..................do...........Income......do......	2,500 00	....
				$39,769 48

APPENDIX "A."—DISBURSEMENTS.

Date of payment.			No. of war'nt	To whom paid,	For what.	Amount.
				Balance,		$582 28
Nov.	4,	1862	6	T. Brown, Treasurer,	Time warrants and interest,	1,466 88
...	6,	...	1271	J. W. Sterling,	Incidental expenses,	150 00
...	6,	...	1272	John Kelly,	Wood,	30 00
...	6,	...	1273	Faculty of University,	Smithsonian observations, &c.,	42 00
...	6,	...	1274	....do..............do	Wood,	21 00
...	11,	...	1275	J. T. Marston,	Merchandise,	9 00
...	15,	...	1277	Weed, Eberhard & Festner,	Stationery,	27 44
...	15,	...	1276	...do.........do............do	......do	4 25
Dec.	3,	...	1278	L. &. J. Kelly	Wood,	60 00
...	12,	...	1279	T. Brown, Treas.,	Interest on time warrants,	138 88
...	12,	...	1280	......do........do	.....do.........do........do	350 00
...	12,	...	1281	......do........do	.....do.........do........do	448 88
...	19,	...	1282	L. D. Brooks,	Wood,	121 12
...	19,	...	7	J. Esser & J. Bayer	Repairs	20 68
...	19,	...	8	......do...........do	.....do	18 86
...	31,	...	1286	Daniel Reed,	Salary,	250 00
...	31,	...	1287	J. P. Fuchs,	...do	250 00
...	31,	...	1289	D. H. Tullis,	...do	25 00
Jan.	2,	1863	1283	E. S. Carr,	...do	250 00
...	2,	...	1285	J. W. Sterling,	...do	250 00
...	2,	...	1288	Tutor Parkinson,	...do	125 00
...	5,	...	1290	Janitor Welch,	...do	75 00
...	5,	...	1284	J. D. Butler,	...do	250 00
...	6,	...	1291	L. & J. Kelly,	Wood,	64 00
...	6,	...	1292	H. C. Manning,	...do	88 00
...	9,	...	9	T. Brown, Treas.,	10 per cent. warrants,	1,800 00
...	9,	...	1293	......do.........do	Interest on........do	16 52
...	10,	...	1294	W. A. Briard,	Merchandise,	2 08
...	17,	...	10	T. Brown, Treas.,	10 per cent. warrants,	3,500 00
...	17,	...	1297	......do.........do	Interest on......do	47 50

APPENDIX "A."—*Disbursements*—continued.

Date of payment.	No. of war'nt	To whom paid,	For What.	Amount.
Jan. 22, 1868	1298	F. Turner,	Wood,	$ 12 00
... 23, ...	1299	M. Frank,	Mileage and per diem,	18 50
... 28, ...	1300	M. M Davis,	........do..........do	18 00
... 29, ...	11	P. L. Neuman,	Repairing roof,	27 50
Feb. 4, ...	1301	Luke Kelly,	Wood,	36 00
... 4, ...	1302	T. Brown, Treasurer,	Interest to Ledyard,	400 00
... 5, ...	1803	......do.........do.	Interest and exchange to Ledyard.	44 25
... 10, ...	1804	H. C. Manning,	Wood.	112 00
... 16, ...	12	T. Brown, Treasurer,	10 per cent. warrants,	2. 500 00
... 16, ...	1305	......do.........do	Interest on warrants,	52 78
... 27, ...	1295	Crosby, Nichols & Co.	North American Review	10 00
... 27, ...	1296	Silliman's Journal,	Subscriptions,	5 00
Mch. 3, ...	1806	D. H. Tullis,	Postage and stationery,	10 00
... 3, ...	1307	Prof. Sterling,	Incidental expenses,	100 00
... 12, ...	13	W. A. Reason,	Repairing, &c.,	27 80
... 12, ...	1308	........do	Blackboards,	14 85
... 26, ...	1810	James Livesey,	Wood,	204 00
... 31, ...	1812	J. D. Butler,	Salary,	250 00
April 1, ...	1318	Daniel Read,	...do	250 00
... 3, ...	1311	E. S. Carr	...do	250 00
... 6, ...	1814	J. W. Sterling	...do	250 00
... 6, ...	1315	J. P. Fuchs,	...do	250 00
... 6, ...	1316	Tutor Parkinson	...do	125 00
... 6, ...	1317	D. H. Tullis,	...do	25 00
... 6, ...	1818	Patrick Walsh,	...do	75 00
... 6, ...	1309	Bliss, Eberhard & Festner	Stationery,	17 51
... 6, ...	14	Law & Lynch...,	Plastering,	185 44
... 6, ...	15	Pat. Higgins,	Carpenter work	48 50
... 6, ...	16	J. M. Haight,	Furniture,	175 00
... 7, ...	17	L. H. Burdick,	Carpenter work,	18 00
... 7, ...	18	Darwin Clark	Furniture	59 00

Apr. 7,	1863	19	J. W. Sterling,	Expenses,	50	00
... 7,	...	1819	Faculty of University,	Smithsonian observations, &c.,	21	00
... 7,	...	1820	......do..........do.	.........do..............do.	81	50
Apr. 7,	1863	1821	J. W. Sterling,	Expenses,	100	00
... 18,	...	20	T. Brown, Treasurer,	10 per cent. warrants,	8,800	00
... 18,	...	1822	......do..........do.	Interest on......do.	126	49
... 18,	...	21	......do..........do.	Payment on loan from School Fund,	5,000	00
... 18,	...	1823	......do..........do.	Interest, School Fund loan,	104	76
... 28,	...	22	Wm. Hall.	Lightning rod,	27	00
May 1,	..	1824	M. D. Miller,	Insurance,	225	75
... 21,	...	23	T. Brown, Treasurer,	On School Fund loan,	2,000	00
... 21,	...	1825	......do..........do.	Interest,..do	54	72
June 5,	...	1826	......do..........do.	.....do.	1,610	00
... 8,	...	24	J. W. Sterling,	Improvements on buildings,	500	00
... 28,	...	25	T. Brown, Treasurer,	On School Fund loan,	2,000	00
... 24,	...		M. M. Davis,	Mileage and per diem,	19	80
... 30,	...	1828	J. W. Sterling,	Expenses,	200	00
... 30,	...	1829	J. D. Butler,	Salary,	225	00
... 30,	...	1830	J. W. Sterling.	.....do.	225	00
... 30,	...	1831	J T. Fuchs,	.....do.	225	00
... 30,	...	1832	Daniel Read,	.....do.	225	00
... 30,	...	1833	E. S. Carr,	.....do.	225	00
... 30,	...	1834	C. H. Allen,	.....do.	225	00
... 30,	...	1835	Tutor Parkinson,	.....do.	125	00
... 30,	...	1836	D. H. Tullis,	.....do.	25	00
... 30,	...	1837	Janitor Walsh,	.....do.	75	00
July 18,	...	26	Delaplaine & Burdick,	Real Estate,	250	00
... 24,	...	1838	D. H. Tullis,	Cash Advanced,	2	45
... 25,	...	27	T Brown, Treasurer,	Loan from School Fund,	2,000	00
Aug, 25,	...	1839	Wm. H. Wyman,	Insurance,	180	50
... 29,	...	28	James McDowell,	Carpenter work,	122	50
... 29,	...	1840	..........do.	...........do.	42	00
Sep. 30,	...	1841	J. W. Sterling,	Salary,	225	00
... 30,	...	1842	Daniel Read,	.....do.	225	00
... 30,	...	1843	J. D. Butler,	.....do.	225	00
... 30,	...	1844	E. S. Carr,	.....do.	225	00
... 30,	...	1845	J. P. Fuchs,	.....do.	225	00

APPENDIX "A."—*Disbursements*—continued.

Date of payment.	No. of War'nt	To whom paid.	For what.	Amount.
Sep. 30, 1863	1346	C. H. Allen	Salary,	$225 00
... 30, ...	1347	Tutor Parkinson	do	125 00
... 30, ...	1348	D. H. Tullis,	do	25 00
... 30, ...	1349	Janitor Walsh	do	75 00
				$37,157 41

MADISON, September 30th, 1863.

We have examined the books and vouchers of T. Brown, Esq., Treasurer of the University of Wisconsin, and compared them with the books, accounts and warrants of the Secretary of the Board, for the fiscal year ending September 30th, 1863, and find that there is a balance belonging to the University of Wisconsin of twenty-six hundred and twelve dollars and seven cents, ($2,612 07), as above shown.

J. L. PICKARD, *Chairman pro tem. of Executive Committee.*
D. H. TULLIS, *Secretary of the Board of Regents.*

APPENDIX "B."—SECRETARY'S REPORT.

Madison, October 1, 1863.

To the Board of Regents of the University of Wisconsin:

The Secretary of the Board of Regents respectfully reports, that during the fiscal year ending on the 30th day of September, ultimo, warrants have been drawn upon the Treasurer of the Board as follows, to wit:

ON THE INCOME FUND.

Date.	To whom issued.	What for.	Amount.
Nov. 4, 1862.	Prof. J. W. Sterling,	Advance for incidental expenses,	$ 150 00
... 4, ...	John Kelley,	Wood,	30 00
... 4, ...	Faculty of the University,	Ringing Bell and taking Smithsonian Observations,	42 00
... 4, ...	......do............do	Wood,	21 00
... 11, ...	J. T. Marston,	Merchandise,	9 09
... 14, ...	Weed & Eberhard,	Stationery,	4 25
... 14, ...	Weed, Eberhard & Co.,	Blank Books, Stationery, &c.,	27 44
Dec. 3, ...	Luke and John Kelley,	Wood,	60 00
... 12, ...	T. Brown, Treas.,	Interest paid 10 per cent. construction warrants,	133 33
... 12, ...	.....do.........do,	........do..............do.............do............do,	350 00
... 12, ...	.....do.........do,	........do..............do..............do............do,	448 33
... 19, ...	L. D. Brooks,	Wood,	121 12
... 31, ...	Prof. E. S Carr,	Salary,	250 00
... 31, ...	Prof. J. D. Butler,	...do	250 00
... 31, ...	Prof. J. W. Sterling,	...do	250 00
... 31, ...	Prof. Daniel Read,	...do	250 00
... 31, ...	Prof. J. P. Fuchs,	...do	250 00
... 31, ...	J B. Parkinson, Tutor,	...do	125 00
... 31, ...	D. H. Tullis, Secretary,	...do	25 00
... 31, ...	Michael Welch, Janitor,	...do	75 00
Jan. 6, 1863	Luke and John Kelley.	Wood,	64 00
... 6, ...	H. C. Manning,	...do	88 00
... 9, ...	T. Brown, Treasurer,	Interest on 10 per cent. construction warrants,	16 52

APPENDIX "B."—*Secretary's Report*—continued.

Date.		To whom issued.	What for.	Amount.
Jan. 10,	1863	W. A. Briard,	Merchandise,	$ 2 08
... 14,	...	Crosby, Nicols & Co.,	North American Review,	10 00
... 14,	...	Proprietors of Silliman's Journal,	Subscription for 1862,	5 00
... 17,	...	T. Brown, Treasurer,	Interest paid on 10 per cent. construction warrants,	47 50
... 22,	...	Francis Turner,	Wood,	12 00
... 28,	...	M. Frank, Regent,	Mileage and per diem,	18 50
... 28,	...	M. M. Davis, Regent,	........do..........do,	18 00
Feb. 4,	...	Luke Kelley,	Wood,	36 00
... 4,	...	T. Brown, Treasurer,	Interest paid on loan to University,	400 00
... 5,	...	.....do.............do,	Int. and Exchange on loan to University,	44 25
... 10,	...	H. C. Manning,	Wood,	112 00
... 16,	...	T. Brown, Treasurer,	Interest paid on 10 per cent. construction warrants,	52 78
Mar. 8,	...	D. H. Tullis, Secretary,	Stationery and Postage,	10 00
... 8,	...	Prof. J. W. Sterling,	Advance for incidental expenses,	100 00
... 12,	...	W. A. Reason,	Black Boards,	14 85
... 17,	...	Bliss, Eberhard & Co.,	Stationery, &c., (Bought by Ruggles, Sec'y.,)	17 51
... 26,	...	James Livsey,	Wood,	204 00
... 31,	...	Prof. E. S. Carr,	Salary,	250 00
... 31,	...	Prof. J. D. Butler,	...do	250 00
... 31,	...	Prof. Daniel Read,	...do	250 00
... 31,	...	Prof. J. W. Sterling,	...do	250 00
... 31,	...	Prof. J. P. Fuchs,	...do	250 00
... 31,	...	J. B. Parkinson, Tutor,	...do	125 00
... 31,	...	D. H. Tullis, Secretary,	...do	25 00
... 31,	...	Patrick Welch, Janitor,	...do	75 00
Apr. 7,	...	Faculty of the University,	Ringing Bell and taking Smithsonian observat'ns,(librarian,)	21 00
7,	...	......do.............do,	......do...... .....do.................do.................do,	31 50
		Sterling,	Advance for incidental expenses,	100 00
			Interest paid on 10 per cent. construction warrants,	126 49
			Interest paid on loan from school fund,	104 76
			Insurance,	225 75

May 21.	...	T. Brown, Treasurer,	Interest paid on loan from school fund,	$54	72
June 6,	...	T. Brown, Treasurer,	...do ... do ... do	1,610	00
June 23,	...	M. M. Davis, Regent,	Mileage and per diem,	19	80
June 25,	...	J. W. Sterling,	Advance for incidental expenses,	200	00
June 30,	...	Prof. J. D. Butler,	Salary,	225	00
June 30,	...	Prof. J W. Sterling	...do	225	00
June 30,	...	Prof. J. P. Fuchs	...do	225	00
June 30,	...	Prof. Daniel Read	...do	225	00
June 30,	...	Prof. E. S. Carr,	...do	225	00
June 30.	...	Prof. Chas. H. Allen,	...do	225	00
June 30.	...	J. D. Parkinson, Tutor,	...do	125	00
June 30,	...	D. H. Tullis, Secretary,	...do	25	00
June 30,	...	Patrick Welch, Janitor,	...do	75	00
July 24,	...	D. H Tullis,	Expenses,	2	45
Aug. 25,	...	W. H. Wyman, Agent,	Insurance,	180	50
Aug. 29,	...	James McDowell,	Carpenter work, repairs	42	00
Sept. 30,	...	Prof. J. W. Sterling,	Salary,	225	00
Sept. 30,	...	Prof. Daniel Read	...do	225	00
Sept. 30.	...	Prof J. D. Butler,	...do	225	00
Sept 30,	...	Prof. E. S. Carr,	...do	225	00
Sept. 30,	...	Prof. J. P. Fuchs,	...do	225	00
Sept. 30,	...	Prof. Chas. S. Allen,	...do	225	00
Sept. 30,	...	J. D. Parkinson, Tutor,	...do	125	00
Sept. 30,	...	D. H. Tullis, Secretary,	...do	25	00
Sept. 30,	...	Patrick Welch, Janitor	...do	75	00
				$11,488	52

APPENDIX "B."—*Secretary's Report*—continued.

ON PRINCIPAL FUND.—*See Chapter* 268, *General Laws of* 1862.

Date.	To whom issued	What for.	Amount.
Nov. 3, 1862	T. Brown, Treasurer,	Ten per cent. warrants redeemed,	$1,466 83
Nov. 14, ...	Jac. Esser and Joseph Bayer,	Repairs on North and South buildings,	20 68
Dec. 13, ...	Jacob Esser & Co.,	Repairs,	18 86
Jan. 9, 1863	T. Brown, Treasurer,	Ten per cent. warrants redeemed,	1,800 00
Jan. 17, ...	T. Brown, Treasurer,	......do..............do...........do.	3,500 00
Jan. 29, ...	P. L. Neuman,	Repairing roof of University Hall,	27 50
Feb. 16, ...	T. Brown, Treasurer,	Ten per cent warrants redeemed,	2,500 00
Mar. 12, ...	W. A. Reason,	Black boards and repairs,	27 80
April 4, ...	Law & Lynch,	Plastering,	185 44
April 6, ...	Patrick Higgins,	Carpenter work,	48 50
April 6, ...	J. Mason Haight,	Chairs and desks for Normal Dep.,	175 00
April 7, ...	Lewis H. Burdick,	Carpenter work,	18 60
April 7, ...	Darwin Clark,	Desk and chairs for Nor. Dep.,	59 00
April 7, ...	J. W. Sterling,	Permanent improvements,	50 00
April 18, ...	T. Brown, Treasurer,	Ten per cent. warrants redeemed,	3,800 00
April 18, ...	T. Brown, Treasurer,	Payment on loan from school fund,	5,000 00
April 28, ...	Wm. Hall,	Lightning rod on South building,	27 00
May 21, ...	T. Brown, Treasurer,	Payment on loan from school fund,	2,000 00
June 8, ...	J. W. Sterling,	Permanent improvements,	500 00
June 23, ...	T. Brown, Treasurer,	Payment on loan from school fund,	2,000 00
July 18, ...	Delaplaine & Burdick,	Real Estate,	250 00
July 25, ...	T. Brown, Treasurer,	Payment on loan from school fund,	2,000 00
Aug. 29, ...	James McDowell	Carpenter work	122 50
			$25,086 61

APPENDIX " B."—*Secretary's Report*—concluded.

The foregoing lists of warrants issued during the last fiscal year, may be appropriately classified as follows:

INCOME FUND.

Salaries of Professors,		**$5,700 00**
Salary of Secretary,		**100 00**
Salary of Janitor,		**300 00**
Incidental expenses and repairs,		**718 80**
Insurance,		**406 25**
Wood,		**748 12**
Interest on ten per cent. warrants,	**$1,174 95**	
Interest on Ledyard loan,	**444 25**	
Interest on loan from School Fund,	**1,769 48**	
		$3,388 68
Mileage and per diem of Regents,		**56 80**
Periodicals,		**15 00**
Old accounts		**60 87**
		$11,488 52

PRINCIPAL FUND.

Ten per cent. warrants redeemed,	**$12,566 88**
Payments on loan from School Fund,	**11,000 00**
Furniture for Normal Department,	**284 00**
Real Estate,	**250 00**
Permanent improvements on buildings,	**1,085 78**
	$25,086 61

D. H. TULLIS,
Secretary of the Board of Regents.

CATALOGUE

OF THE

Officers and Students of the University of Wisconsin,

FOR THE YEAR CLOSING NOVEMBER 26TH, 1863.

BOARD OF REGENTS.

J. T. LEWIS, Secretary of State, *ex officio*,..Madison.
J. L. PICKARD, Sup't of Public Instruction, *ex officio*,........................Madison.
O. M. CONOVER, Term expires 1865..Madison.
MOSES M. DAVIS, do do ....Portage.
NELSON DEWEY, do do ....Cassville.
HARRISON C. HOBART, do do ....Chilton.
M. FRANK, do 1867, ...Kenosha.
JOHN W. STEWART, do do ....Monroe.
THEODORE PRENTISS, do do ....Watertown.
EDWARD SALOMON, do do ....Milwaukee.
LEVI B. VILAS, do 1869, ...Madison.
D. WORTHINGTON, do do ....Madison.
GEO. B. EASTMAN, do do ....Fond du Lac.
HENRY D. BARRON, do do ....St. Croix Falls.
D. H. TULLIS, *Secretary*,..Madison.
TIMOTHY BROWN, *Treasurer*,..Madison.

FACULTY.

JOHN W. STERLING, A. M., *Dean of the Faculty, and Professor of Mathematics and Natural Philosophy.*

DANIEL READ, LL. D., *Professor of Mental, Ethical, and Political Science, Rhetoric and English Language.*

EZRA S. CARR, M. D., *Professor of Chemistry and Natural History.*

JAMES D. BUTLER, LL. D., *Professor of Ancient Languages and Literature.*

JOHN P. FUCHS, M. D., *Professor of Modern Languages and Literature.*

J. D. PARKINSON, A. B., *Tutor.*

CHAS. H. ALLEN, *Professor of Normal Instruction.*

MISS ANNA W. MOODY, *Preceptress in Normal Department.*

DAVID H. TULLIS, *Instructor in Commercial Calculations and Bookkeeping.*

GRADUATES OF THE UNIVERSITY.

JULY, 1854.

NAME.	RESIDENCE.
Levi Booth, A. M.,	Pike's Peak.
Charles T. Wakeley, A. M	Madison.

JULY, 1856.

Samuel S. Benedict, A. M	Madison.
James M. Flower, A. M.,	do
Sidney Foote, A. M.,	do
Burgess C. Slaughter, A. M.,*	Middleton.

JULY, 1857.

Sinclair W. Botkin, A. M.,*	Madison.
Thomas D. Coryell, A. M.,	do
Charles Fairchild, A. M.,*	do
William C. Jenckes, A. M	Terre Haute, Ind.
John F. Smith, A. M	Cincinnati, Ohio.

JULY, 1858.

Richard W. Hubbell, A. M.,*	Milwaukee.
John W. Slaughter, A. B.,	Culpepper, Virginia.
William F. Vilas, A. M.,*	Madison.

JULY, 1859.

Alexander C. Botkin, A. M	Madison.
Hill C. Bradford, P. B	Virginia.
Leonard S. Clark, A. M	California.
Samuel Fallows, A. M.,*	Oshkosh.
Edward B. Guild, A. M	Kansas.
Elbert O. Hand, A. M	Racine.
Edwin Marsh, A. M.,*	Beaver Dam.
Phillip C. Slaughter, P. B	Virginia.

JUNE, 1860.

Geo. W. Bird, A. M	Madison.
Thomas J. Hale, A. M	Milwaukee.
William P. Powers, A. M.,*	Madison.
John E. Sutton, A. M.,*..†	do
Leander M. Comins, A. M.,*	Maine.
John B. Parkinson, A. M.,	Fayette.
Milan W. Serl, P. B	Fairchild.
Fred T. Starkweather, A. M.,*	Milwaukee.

JUNE, 1861.

Farlin Q. Ball, P. B.,*	Monroe.
Henry Vilas, A. B.,*	Madison.
John D. Parkinson, A. B.,	do
William E. Spencer, A. B.,	do
James B. Britton, A. B.,	do
William W. Church, A. B.,*	do
Almerin Gillett, P. B.,*	Geneva.
S. Azariah Hall, A. B.,	Eau Claire.
Michael Leahy, P. B.,*	Portland.

JUNE, 1862.

NAME.	RESIDENCE.
Michael Leahy, A. B.,*	Portland.
Isaac N. Stewart, P. B.,*	Waukesha.

JUNE, 1863.

NAME.	RESIDENCE.
Pitt Cravath,. P. B.	Whitewater.
Milton S. Griswold, A. B.,	Waukesha.
Levi M. Vilas, A. B.	Madison.
Frank Waterman, P. B ,	Madison.

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* In the national army. † Deceased.

STUDENTS IN ATTENDANCE.

WINTER TERM—1863.

NAME.	RESIDENCE.
W. W. Ainsworth	Madison.
Wm. P. Atwell	do
Edwin S. Bean	do
Charles Birge,	Whitewater.
Chas. P. Blachly,	Lodi.
James A. Blake	Elliota, Minn.
Byron S. Bush,	Madison.
James D. Butler, Jr.	do
James Byrne,	do
Geo. P. Clough,	Westport.
Eugene M. Congar,	Whitewater.
O. H. Congar,	do
Edwin D. Cornish	Fisk's Corners.
Pitt Cravath,	Whitewater.
Samuel E. Crawford	Mayville.
James A. Danforth,	Prairie du Sac.
Theodore Deforest,	Madison.
John W. C. Dinsmore,	Ashton.
Newell H. Dodge,	Madison.
Robert Dow,	Cambridge.
Gerard Dunning,	Madison.
Marcus S. Fodsee	Vienna.
Marvin Foresman	Madison.
C. N. Foster,	Mayville.
E. M. Fuller,	Madison.
Robt. B. Gilbert	Fitchburg.
Isaiah Goldy,	Lyons, Iowa.
Joseph W. Hobbins,	Madison.
John Hollis,	Vienna.
Geo. B. Hopkins	Madison.
William B. Jarvis, Jr.	do
Eugene A. Jones,	do
John W. Kavanaugh,	do
Daniel E. Maloney,	do

NAME.	RESIDENCE.
Edwin C. Mason,	Madison.
Thomas M. Maxwell,	do
Wm. A. Mears, Jr.	do
Gideon W. Minkler,	Oshkosh.
Geo. H. Miller,	Fitchburg.
James Muldoon,	Madison.
Frank M. Muldoon	do
John Muir,	Midland.
Richard E. Petherick,	Madison.
Geo. H. Pradt,	do
Geo. S Rodgers,	Westport.
Augustus A. Salisbury,	Oregon.
D. C. Salisbury,	do
Clemens Schauroth	Madison.
R T. Scott,	Yellowstone.
James S. Smith,	Madison.
John C. Spooner,	do
Philip Spooner,	do
Asher Starkweather	Cambridge.
Philip Stein,	Waukesha.
Henry R. Stevens,	Kingston.
J. A. Sweany,	Fort Winnebago.
Chas. K. Tenney,	Madison.
Levi M. Vilas,	do
Chas. H. Vilas,	do
Henry C. Vilas,	Ogdensburg, N. Y.
Chas. E Vroman,	Stoner's Prairie.
Frank Waterman,	Madison.
N. W. Wells	do

SPRING TERM—1863.

W. W. Ainsworth	Madison.
Albert Alden,	Delafield.
Horatio N. Ames,	Oregon.
Calvin P. Bailey,	Delevan.
Henry C. Bartholomew,	Geneva.
Charles Birge,	Whitewater.
Chas. P. Blachly	Lodi.
James A. Blake,	Elliota, Minn.
H. W. Bolender	Orangeville, Ill.
John Bolton,	Madison.
Horace Booth,	do
Byron S. Bush,	do
James D. Butler, Jr.	do
James Byrne,	do
Wm. H. Camerer,	Logansville, Pa.
S. Y. Cameron,	Sun Prairie.
Geo. E. Carpenter,	Black Earth.
Ezra S. Carr,	Madison.
Thos. B. Chynoweth,	do
Herbert Chynoweth,	do
Geo. P. Clough,	do
Eugene M. Congar,	Whitewater.
O. H. Congar,	do

NAME.	RESIDENCE.
Edwin D Cornish,	Fisk's Corners.
B. E. Craig....,	Capville.
Pitt Cravath,...	Whitewater.
Matthew Cunningham,	Burlington.
Hiram H. Curtis,	Geneva.
Ashbury Daggett	Madison.
W. C. Damon,	Burke.
James A. Danforth,	Prairie du Sac.
Newell H. Dodge,	Madison.
William H. Dodge,	Johnson's Creek.
Robt. Dow,	Cambridge.
David B. Dryden	Blue Mounds.
John J Dunlap	Burke.
Gerard Dunning,	Madison.
Marvin Foresman,	do
E. M. Fuller,	Madison,
Rob't B. Gilbert	Fitchburg.
Isaiah Goldy	Lyons, Iowa.
F. H. Gray	Madison,
Milton S. Griswold,	Waukesha.
John E. Halbenkann,	Grafton.
Wilbur F Harnden	Verona.
Reuben E. Helms	Mtdison.
James L. High,	Black Earth.
James H. Highland,	Madison.
Joseph W. Hobbins,	do
I. O. Isham	Blue Mounds.
Wm. B. Jarvis, Jr	Madison.
J. H. Johnson,	Deerfield.
John L. Kester	Prairie Valley.
John Leahy,	Portland.
S. Leahy,	do
A. F. Lewis,	Whitewater.
Benedict S. Lewis	Lodi.
Wm. W. Lyons	Harden, Indiana.
Edwin C. Mason	Madison.
Sam'l Maxwell	do
Tho's M. Maxwell	do
Andrew Mayers	do
Wm. McComb	Blooming Grove.
G. B. McKeeby,	Oregon.
Edgar C. McLaughlin	Whitewater.
Wm. A. Mears, Jr.	Madison.
J. E. McMullen	Brilleon.
Geo. H. Miller	Fitchburg.
Timothy Moroney	Richland Center.
John Muir.	Midland.
Torge J. Olson	New Lisbon.
Arthur Peck	Monroe.
Richard E. Petherick,	Madison.
Geo. H. Pfadt	do
M. M. Rice,	Liberty.
Jeremiah Rockey	Orangeville, Ill.
Augustus H. Salisbury	Oregon.
Clemens Schauroth	Madison.
Frederick Scheiber	West Bend.
Jacob S. Schwartz,	Orangeville, Ill.
Henry Schwin,	Newberg.
R. T. Scott,	Yellow Stone.
T. J. Sloan...	Watertown.

NAME.	RESIDENCE.
James S. Smith,	Madison.
Clark A. Smith,	do
John S. Spencer,	Geneva.
John C. Spooner,	Madison.
Asher Starkweather,	Columbus.
Phillipp Stein,	Waukesha.
J. A. Sweany,	Fort Winnebago.
Cha's K. Tenny,	Madison.
Elbridge Thompson,	Oregon.
Levi M. Vilas,	Madison.
Henry C. Vilas,	Ogdensburg, N. Y.
Charles E. Vroman,	Stoner's Prairie.
Washington I. Wallace,	Baraboo.
Frank Waterman,	Madison.
Calvin Waterman,	do
N. W. Wells,	do
M. W. White,	Sandusky.
Edwin Winslow	Hillsboro.

LADIES.

Mary A. Allen,	Black Earth.
Mary A. Allen,	Linn.
Emma Andrews,	Madison.
Adelaide O. Bailey,	Sun Prairie.
Malvina Bailey,	do
Caddie C. Bates,	Palmyra.
Clara J. Bird,	Madison.
Mellie Bradley,	do
Mrs. Mattie S. Bull,	Middleton.
Calista A. Burrit,	Manitowoc.
Ellen Byrne,	Madison.
Flavia Camp,	Black Earth.
Josie A. Case,	Geneva.
Annie E. Chamberlain,	Manitowoc.
C. E. Chandler,	Mount Vernon.
Clara J. Chandler,	do
Alethe C. Church,	Madison.
Sarah S. Church,	do
Sarah E. Earll,	Dunn.
Ella Fox,	Madison.
Anna Gates,	Geneva.
Abbie Gilbert,	Kenosha.
Belle T. Giles,	Stoughton.
Flora E. Griffin,	Madison.
Mrs. Libbie T. Grout,	Middleton.
Alice S. C. Hawley,	Madison.
M. L. Hecox,	do
Eveline Hibbard,	Rutland.
Marion E. Hill,	Springfield.
Maria S. Hill,	Black Earth.
Lucretia Huntington,	Madison.
Adelle M. Jackson,	Geneva.
Emily E. Johnson,	Madison.
Amanda Larkin,	do

NAME.	RESIDENCE.
Lavisa A. Lewis,	Middleton.
Fanny M. Leavitt,	Madison.
Jennie Livingston,	Farmington.
Maggie Mayers,	Madison.
Juliette F. Mann,	do
Hattie M. Mann,	do
Carrie Mears,	do
Artie R. Mills,	do
Eva M. Mills,	Lancaster.
Mary Morison,	Springdale.
Cordelia A Niles,	Windsor.
Elona M. Park,	Black Earth.
Lugena H. Park,	do
E. A. Paine,	Madison.
Amelia A. Pierce,	Spring Valley.
Julane M. Potter,	Vienna.
Sarah Proudfit,	Madison.
Emily Quiner,	do
Nellie Quiner	do
Kittie Quiner,	do
Agnes Read,	do
Mary Read,	do
Julia Rowley,	Black Earth.
Hattie Sanford,	Middleton.
Sophia Schmedeman,	do
Lydia Sharp,	Madison.
Emma W. Sharp,	do
Phebe A. Skinner,	do
Ethelinda B. Smith,	do
Eliza A. Smith,	do
Millie Stevens,	Stoner's Prairie.
Frank L. Stiles,	Middleton.
M. S. Thompson	Oregon.
Anna E. Taylor,	Middleton.
Minnie Taylor,	Madison.
Jennie A. Walker,	Black Earth.
Mary L. Welch,	Maoison.
Oliva Wheelright,	Middleton.
Anna M. Williams,	Black Earth.
Martha Winnie,	Milwaukee.
Frances S. Winslow	Hillsboro.

FALL TERM—1863.

Albert Alden,	Delafield.
Calvin P. Bailey,	Delavan.
Wm. C. Bailey,	do
Wesley E. Bailey,	Sun Prairie.
Rob't McKee Bashford,	Fayette.
Clayton Adalbert Bedford,	Oregon.
John D. Bicknell,	Lake Mills.
Chas. Birge,	Whitewater.
Chas. P. Blachly,	Lodi.
James A. Blake,	Elliota, Minn.
Harrison W. Bolender,	Orangeville, Ill.

NAME.	RESIDENCE.
Horace Booth,	Madison.
Benj. Buck, Jr.,	Grand Rapids.
Byron S. Bush,	Madison.
James D. Butler, Jr.,	do
James Byrne.	do
Wm. Henry Camerer,	Orangeville, Ill.
Sam'l Y. Cameron,	Sun Prairie.
Tyler B. Campbell.	Evansville.
Herbert Wm. Chynoweth,	Madison.
Thomas B. Cynoweth,	do
Azro M. Clark,	Paoli.
Scott Clark,	Madison.
Geo. P. Clough.	do
A. G. Coburn,	Prairie du Sac.
Eugene M. Congar,	Whitewater.
Peter Conlan,	Raymond.
Geo. Cross,	Heart Prairie.
Asbury Daggett	Madison.
Wm. C. Damon,	Burke Center.
Chas. T. Dickson,	Madison.
Newell H. Dodge,	do
David B. Dryden,	Blue Mounds.
Theron E. Dryden,	do
John Jay Dunlap,	Burke.
Gerard Dunning,	Madison.
Jas. Henry Fish,	Pewaukee.
Robt. B. Gilbert,	Fitchburg.
Edward Watson Gilmore,	Sauk City.
Abram D. Groesbeck,	Linn.
Frank Hill Grey,	Madison.
Geo. Hauck,	Belleville, Ill.
Thos. C. Hayden,	Sun Prairie.
James L. High,	Black Earth.
Elijah Higham,	Fitchburg.
Fred. Hill,	Mantorville, Minn.
J. E. Halbenkann,	Crafton.
John Howitt,	Sussex.
Ira O. Isham,	Blue Mounds.
Joseph Jolly,	Fayette.
Wesley Judkins,	Madison.
Allen Kendall,	Prairie du Sac.
Chas. H. Kellogg,	Madison.
John L. Kester,	Rock Grove, Ill.
Henry A. Knight	Madison.
Adam A. Krape	Orangeville, Ill.
Robt. D. Krebs,	Madison.
John Kremer,	Sauk City.
Theodore F. Leavitt	Summit.
Albert F. Lewis,	Whitewater.
Ledyard V. Lewis	Sun Prairie.
Joseph A. Mann,	Madison.
Daniel E. Maloney	do
Geo. F. Martin,	Mineral Point.
Edwin C. Mason,	Madison.
Franklin H. Mason,	do
Sam'l Maxwell,	do
Thomas M. Maxwell	do
Jasper N. MacCormack,	Burke.
Gilbert E. McKeeby,	Oregon.
E. C. McLaughlin,	Whitewater.

NAME.	RESIDENCE.
John E. McMullen	Brillion.
William A. Mears,	Madison.
Gideon W. Minckler,	Oshkosh.
Walter B. Nickles,	Summit.
Arthur Peck,	Monroe.
Geo. H. Pradt,	Madison.
Lewis E. Reed,	Green Lake.
George W. Rima,	Oneco, Ill.
George H. Roby,	Kekoskee.
Jeremiah Rockey,	Orangeville, Ill.
Geo. S. Rodgers,	Westport.
Augustus H. Salisbury,	Oregon.
D. C. Salisbury,	do
Clemens Schauroth	Madison.
Frederick Scheiber,	West Bend.
Thomas J. Sloan,	Watertown.
Jacob S. Schwartz,	Orangeville, Ill.
John L. Swats,	do
Henry Schwin,	New Berg.
Samuel R. Smith,	Burke Centre.
Clark A. Smith,	Madison.
John A. Spencer,	Evansville.
John C. Spooner,	Madison.
Philip Spooner,	do
Asher Starkweather,	Columbus.
Phillipp Stein,	Waukesha.
John Strohn,	Oneco, Ill.
John G. Taylor,	Hancock.
Abner L. Thomas,	Annaton.
Charles K. Tenney	Madison.
A. F. Tucker,	New London.
Chas. E. Vroman,	Stoner's Prairie.
Chas. H. Vilas,	Madison.
Henry C. Vilas	Ogdensburg, N.
W. S. Vilas,	do
H. M. Wadleigh,	Stevens Point.
Washington I. Wallace,	Baraboo.
Marquis Webb,	Belleville.
William H. Winans,	Clarksfield, Ohio.

LADIES.

Mary Adne Allen	Black Earth.
Mary A. Allen	Geneva.
Belle Arland,	Cross Plains.
Addie O. Bailey.	Sun Prairie.
Julia B. Beardsley,	Burke Center.
Sarah M. Bell,	Pewaukee.
Mary I. Boercherdt	Manitowoc.
Clara I. Bird,	Madison.
Mellie Bradley,	do
Mary L. Bradley,	Broadhead.
Mary H. Bray,	Madison.
Ellen Byrne,	do
Flavia A. Camp	Black Earth.

NAME.	RESIDENCE.
Sarah Camp,	Black Earth.
Josie A. Case,	Geneva.
Ella A. Cary,	Madison.
Clara J. Chamberlain,	Manitowoc.
Annie E. Chamberlain,	do
E. C. Chandler,	Mt. Vernon.
Dorotha H. Charleton,	Union Town.
Marion B. Chase,	Madison.
Alethe C. Church	do
Sarah S. Church,	do
Hattie N. Clarke,	Pewaukee.
Hattie A. Coffin,	Sun Prairie.
Martha A. Curtis,	Mauston.
Abbie Dickerman,	Madison.
Elmira L. Duncan,	Dane.
Lucretia A. Duncan,	do
Addie M. Easton,	Half Day, Ill.
Emma Fisher,	Vienna.
Sarah J. Fields,	Windsor.
Elizabeth A. French	Madison.
Anna E. Gates,	Geneva.
M. Abbie Gilbert,	Kenosha.
Olive Gilbert,	Oregon.
Belle T. Giles,	Stoughton.
Mattie Goodwin,	West Middleton.
Flora E. Griffin,	Madison.
Alfreda F. Hall,	Elkhorn.
Emily J. Harwood	Dane.
Mary Harris,	South Bend, Ill.
Alice L. C. Hawley,	Madison.
Draconia B. Helms,	Fitchburg.
Marion E. Hill,	Geneva.
Hattie M. Honn,	Lone Rock.
Arabella B. Hurlbut	Baraboo.
Abbie Ingalsbee,	Stoners Prairie.
Adelle M. Jackson,	Elkhorn.
Amanda J. Kellogg,	Madison.
Hattie M. Kolback,	Belleville.
Lucina A. Larkin,	Madison.
Amanda J. Larkin,	do
L. Julia Leach,	Ripon.
Fannie M. Leavitt,	Madison.
Almira M. Lewis,	Burke Center.
Lucina R. Lewis,	do
Lavisa A. Lewis,	Middleton.
Lizzie Lester,	Dane.
Corilla A. Lester,	do
Jennie A. Livingston,	Farmington.
Emma A. Livingston,	do
Juliette F. Mann,	Madison.
Hattie M. Mann,	do
A. Hattie Main,	Oregon.
C. Helen McDill,	Plover.
Narcissa McDill,	do
Eva M. Mills,	Lancaster.
Achsah D. Murry,	Burke Center.
Alpha C. Neal,	Pleasantville, Iowa.
Helen V. Noble,	Madison.
Eliza A. Paine,	do
Ellen M. Paine,	do

NAME.	RESIDENCE.
Elesta Palmer,	Oregon.
Elona M. Park,	Black Earth.
Lugene H. Park,	do
Lillian De F. Park,	do
L. Helena Parkinson,	Madison.
Julane M. Potter,	Vienna.
Sarah M. Proudfit,	Madison.
Emily Quiner,	do
Mary B. Read,	do
Susan L. Rawson,	Sun Prairie.
Nancy M. Rood,	do
Laura J. Robbins,	Mt. Vernon.
Elizabeth Robson,	Madison.
Lucretia D. Rittenhouse,	Monroe.
Louisa A. Rittenhouse,	do
Hettie M. Rusk,	Viroqua.
Ann R. Sayles,	West Middleton.
Sophia C. Schmedeman,	Middleton.
Annie E. Smith,	Eureka.
Lydia A. Sharp,	Madison.
Eliza A. Smith,	do
Mary J. Smith,	Sun Prairie.
Susie C. Smith,	Middleton.
Mary Sanford,	Alderly.
Mattie E. Stahl,	Fremont, Ohio.
Millie Stevens,	Stoner's Prairie.
Nellie L. Strangeway,	Lodi.
Sarah J. Sweet,	Mt. Vernon.
Ellen M. Sweet,	do
Minnie Taylor,	Madison.
Annie Taylor,	Middleton.
Ida F. Tenney,	Madison.
Mary Turner,	do
Philene Tuttle,	Elkhorn.
Mary Van Buren,	Middleton.
Helen Van Kleek,	Sun Prairie.
Ruth A. Van Valkenburg,	Baraboo.
Augusta M. Ward,	Delavan.
J. Addie A. Waker,	Plover.
Olive J. Wheeler,	Pheasant Branch.
Oliva Wheelright,	Middleton.
Helen S. Wilder,	Sun Prairie.
Flora P. Wiley,	Galva, Ill.
Cora Williams,	Stoner's Prairie.
Martha Winnie,	Milwaukee.
Luna E. Young,	Fitchburg.

SUMMARY.

WINTER TERM.—Whole number in attendance,		63
Full classical,	12	
Scientific,	17	
Preparatory,	34	
	63	
SPRING TERM.—Whole number in attendance,		177
Gentlemen,	101	
Ladies,	76	
	177	
Full classical,	15	
Scientific,	20	
Preparatory,	30	
Normal,	112	
	177	
FALL TERM.—Whole number in attendance,		229
Gentlemen,	110	
Ladies,	119	
	229	
Full classical,	13	
Scientific,	22	
Normal,	162	
Preparatory,	32	
	229	
Whole number of different students for the year,		347

COMMERCIAL COURSE.

NAME.	RESIDENCE.
George W. Allen,	Madison.
W. P. Atwell,	do
Harry Adams,	do
C. W. Blaser,	do
Mitchell Brown,	Sun Prairie.
William H. Bowen,	Madison.
Philip Berry,	Fitchburg.
Christian Beck,	Madison.
James Barnard,	Arena.
John M. Butts,	Milton.
Simon Casey,	Blue Mounds.
N. A. Crampton,	Madison.
Miss M. S. Cowie,	Badger Mills.
Jerome Clark,	Madison.
A. W. Carpenter,	do
Stephen Cross,	Windsor.
Austin Dutcher,	Madison.
John M. Dale,	Mineral Point.
Edgerton Dale,	do
Daniel A. Davis,	Madison.
Edwin M. Dorn,	do
William Filkins,	do
John C. Ford,	do
Arthur Gleason,	do
Joseph Goodwin,	West Middleton.
Patrick Hickey,	Madison.
John C. Henry,	Verona.
J. H. Highland,	Madison.
J. W. Hobbins,	do
Butler Johnson,	do
Conrad Kreuz,	do
George W. King,	do
H. C. Krouse,	do
Lloyd S. Kniffin,	Rutland.
Miss S. Lacy,	Madison.
John Lorch,	Pheasant Branch.
George Lincoln,	Madison.
John T. Lawrence,	New York.
Miss Susan Libby,	Madison.
Robert L. McConnell,	do
W. S. Noland,	do
Edward Noyes,	do
Nelson Pierce,	Pierceville.
John Regan,	Madison.
L. F. Robinson,	do
Henry Starks,	do
George W. Smith,	do
George W. Stoner,	do
William Seaver,	Darien.
James S. Smith,	Madison.
George W. Vroman,	Stoner's Prairie.
Edward Voight,	Madison.
D. H. Wright,	do
Miss Clara Watson,	Mazomanie.
Joseph C Willing,	Black Earth.
Edwin Winslade,	Madison.
Joseph Watkins,	do

SUBJECTS OF INSTRUCTION.

CLASSICAL COURSE.

FIRST YEAR.

First Term.

Mathematics,	Algebra.
Latin,	Livy, Lincoln's.
Greek,	Xenophon's Anabasis.
History,	United States.

Second Term.

Mathematics,	Algebra completed—Solid and Spherical **Geometry**, Plane Trigonometry.
Latin,	Livy continued.
Greek,	Xenophon's Memorabilia.
History,	General.

Third Term.

Mathematics,	Mensuration, Surveying, Navigation, use of Instruments, Spherical Trigonometry.
Latin,	The Odes of Horace.
Greek,	Xenophon's Memorabilia continued.
English Language,	Lectures and Quackenbos.

SECOND YEAR.

First Term.

Mathematics,	Analytical Geometry.
Latin,	Horace—Satires.
Greek,	Homer—Iliad, Owen's.
French,	Fasquelle's Course.

Second Term.

Mathematics,	Differential and Integral Calculus.
Latin,	Horace—Epistles.
Greek,	Homer, Æschylus—Prometheus.
French,	Robertson's Method.

Third Term.

Mathematics,	Applications of the Calculus,
Natural Philosophy,	Mechanics, Snell's Olmsted.
Latin,	Horace finished.
Greek,	Homer or Sophocles.
French,	Reading from Chapsal's Leçons et Models de Literature.

THIRD YEAR

First Term.

Natural Philosophy	Mechanics, Hydrostatics, Pneumatics, &c., Snell's Olmsted.
Latin,	Tacitus—Germania and Agricola.
Greek,	Demosthenes—De Corona, or Thucydides.
Rhetoric	Blair.
English Literature,	Shaw and Chambers.

Second Term.

Natural Philosophy	Completed.
Astronomy,	Snell's Olmsted.
Latin,	Tacitus or Juvenal.
Greek,	Demothenes, Thucydides, or the Clouds of Aristophanes.
Mental Philosophy,	Intellectual Powers.

Third Term.

Astronomy,	Snell's Olmsted.
Latin,	Juvenal and Persius.
Greek,	Eschylus.
Mental Philosophy	Active Powers.
Logic,	Whatcley.

FOURTH YEAR.

First Term.

Ethics,	Haven.
Christian Evidences	Lectures.
International Law,	Kent.
History of Philosophy,	Lectures.
Chemical Philosophy,	Lectures.
German,	Ahn's Method.

Second Term.

Civil Polity,	Kent and Paley.
Constitutional Law,	Kent.
Chemistry,	The Metals, Organic—Lectures.
German,	Translations from English into German—Select Readings.

Third Term.

Political Economy,	Say's.
Geology,	Lectures.
Botany,	Lectures.
Physiology,	Lectures.
German,	Reading of Schiller's or Goethe's Plays.

The Scientific Course is the same as the Classical, omitting the Ancient Languages. Most of those, however, who pursue this course, take Latin, which is earnestly recommended.

Each student is expected to attend three recitations or lectures daily. There are also frequent exercises in declamation and composition.

NORMAL DEPARTMENT.

The Regents of the University of Wisconsin take pleasure in announcing that they have established a Normal Department, and have obtained the services of Prof. Charles H. Allen, (Agent of the Board of Regents of Normal Schools), as its Principal. This department will be opened on the 16th of March next.

The South Dormitory Building of the University will be devoted to the use of the ladies who may become connected with the school. A portion of the building will be occupied by the family of the Principal, under whose immediate charge the lady pupils will be placed. Prof. Sterling, the Dean of the University Faculty, with his family, will also reside in the building, and ample provision will be made therein for boarding the pupils.

A commodious room in one of the wings of University Hall, (the main edifice), will also be thoroughly fitted up as a school room for the Normal Department.

All members of the Normal School, in addition to the proper exercises of that department, will, without additional charge, have access to the lectures and other exercises of such other University Classes as, with the approbation of their Principal, they may elect to attend.

The well known character of Prof. Allen as a Normal Instructor, the healthfulness and beauty for which the site of the University is famed, the ample arragements which will be made within its spacious grounds and buildings for the accommodation of students of either sex, the advantages of access to its library and cabinet, as well as to the class exercises of its different departments, and the use of its scientific apparatus, will doubtless commend the University Normal School to those who are seeking to educate themselves for the high vocation of the Teacher.

More specific information can be obtained by addressing C. H. Allen, Madison, Wis.

J. L. PICKARD, *President Regents, pro tem.*

In pursuance of this notice from the Regents of the University, the Normal Department was opened at the specified time, and has completed two successful terms. The result thus far has abundantly established the practicability and usefulness of the department, and also that the advantages offered will be duly appreciated by those seeking to become Teachers or thorough Scholars.

The department will be continued as a regular department in the University: a Graduating Course has been arranged, and it is believed such opportunities can be offered as will secure a full and permanent patronage. While the great aim of the department will be to fit teachers for their arduous labor, the doors will not be closed to any who desire, by close application, to secure thorough scholarship.

The Lectures in the University Courses, upon Chemistry, Geology, Botany, Mechanical Philosophy and English Literature, will be free to all.

A Gymnasium will be fitted up in the South Building, where ladies will be trained in Lewis' new system of gymnastics.

The entire South Building, exceping rooms for the Dean of the Faculty, has been set apart for a Boarding House, dormitories and other rooms necessary for the department, and will be under the special charge of the Professor of the department, aided by the Preceptress.

Ladies desiring board will be received into the family of the Professor, and it will be the aim to make both the privileges and restraints as homelike as possible.

A few rooms will be rented in the building to ladies desiring to board themselves; they will, however, be under the same regulations as members of the family.

Gentlemen can procure table board in the Dining Hall, and rooms in the other University buildings, or they can obtain board and rooms at reasonable rates, in families not far distant.

SUBJECTS OF INSTRUCTION.

JUNIOR YEAR.

First Term.

Mathematics	Higher Arithmetic, Mental and Written.
Language,	Grammar, Verbal Analysis, Syntax.
	Geography and Map Drawing,
	General Exercises.

Second Term.

Mathematics	Higher Arithmetic completed.
Language,	Grammar, Verbal Analysis, Sentential Analysis.
Natural Science	Physiology.
	General Exercises.

Third Term.

Mathematics,	Elementary Algebra.
Language,	Composition.
Natural Science,	Physical Geography.
History,	United States.

MIDDLE YEAR.

First Term.

Mathematics,	Elementary Algebra, Completed.
Language,	Rhetoric.
Natural Science,	Natural Philosophy.
	Constitution and Science of Government.

Second Term.

Mathematics,	Geometry.
Language,	Criticism and English Literature.
Natural Science,	Zoology.
	Political Economy.

Third Term.

Mathematics,	Higher Algebra.
Language,	German.
Natural Science	Botany.
Philosophy,	Mental.

SENIOR YEAR.

First Term.

Mathematics	Algebra, Completed.
Language,	German
Natural Science,	Chemistry.
Philosophy,	Moral.

Second Term.

Mathematics,	Geometry.
Language	German.
Natural Science,	Geology.
History,	Ancient.

Third Term.

Mathematics,	Trigonometry and Surveying.
Language,	Science of Language.
Nat. Science and Mathematics,	Astronomy.
Language	Essays.

Instruction in the Theory and Practice of Teaching, including object lessons, oral instruction, &c., will be given by lectures and from reference books in the Normal Library throughout the course—and during the last year the pupils will be thoroughly reviewed in Educational History.

General exercises in Reading, Orthography, Writing, Declamation and Recitation will continue, as found necessary, throughout.

The study of Latin is earnestly recommended to those who can find time to devote to it from their other studies, and Latin or French will be accepted, in graduating, for German.

Pupils may enter any year or term for which an examination shows them qualified.

COMMERCIAL DEPARTMENT.

This School was for two years in successful operation in the city of Madison, under the denomination of "Bacon's Commercial College."

It is now a part of the University. At present, rooms are occupied in Bruen's Block.

It is the purpose of the Board of Regents in the establishment of this department to afford the student an opportunity to qualify himself for prosecuting the Mercantile Profession in any department and to any extent.

The Course is as extensive and thorough as that of the best Commercial Colleges in the country. Special attention is given to Single and Double Entry Book-Keeping, embracing every department of Business Accounts, to Commercial Calculations, Practical Penmanship, &c., &c.

Course of Instruction.—The plan adopted in teaching combines practice with theory; instead of Text Books, the pupils are exercised in making original entries of every day business transactions—Journalizing, Posting, Balancing Accounts, Opening and Closing a great variety of different sets of Books, both for partnership and individual business—where the business has been prosperous, and adverse, and thus qualifying the student for entering upon the *practical* duties of the Accountant in any kind of business.

Preparatory Qualifications.—Nothing more than a common school education is necessary; if the student is found deficient in mathematics, he will be taught free of charge.

Evening Sessions will be held from October to April, giving sufficient opportunity for gentlemen engaged in business through the day, to acquire the course during the winter evenings.

Review, &c.—Persons having paid their tuition may attend the School as long as they please—having the privilege of completing the course at their option. They can also review, at any time, without additional charge.

The School is open for Ladies, for whom a separate room is provided.

Students are instructed individually, and can enter at any time.

The usual time required to complete a full course is from 8 to 12 weeks.

TERMS.—	For a full course, (time unlimited), in advance, for gentlemen,…………	$30
	For a full course, (time unlimited), for ladies,……………………………	25
	Penmanship alone, (per month)……………………………………………	4

For further particulars address D. H. TULLIS, Instructor, Madison, Wis.

PREPARATORY DEPARTMENT.

Experience in this University, as in our Western Universities generally, has demonstrated the necessity of provision for instruction in branches which are properly preparatory to the different university courses.—Young men of mature age often come to the University for instruction in some of its appropriate subjects, who wish also to perfect themselves in more elementary branches. To close the doors of the University upon this class of young men, or not to afford them the facilities of instruction which they need, would be greatly to limit the sphere of its usefulness as a State institution.

Provision is therefore made for full preparatory instruction at the University Buildings. This instruction, under the direction and supervision of the Faculty, will be rendered by a competent Tutor. Those wishing preparation for the regular classes, merely a business education, or improvment in preparatory studies with reference to teaching, will find within the University instruction adapted to their especial wants.

Students, of a suitable age, in this department are allowed to occupy rooms in the University Buildings.

TERMS OF ADMISSION.

Candidates for admission to the first year of the Classical Course, must pass a satisfactory examination in the common English branches, the Elements of Algebra (Ray's), Plane Geometry (Loomis'), Latin Reader, Cæsar or Cornelius Nepos, Virgil's Æneid, (six books—the edition of Frieze is preferred as far as the best,) Crosby's Greek Lessons, and the Anabasis of Xenophon.

Instead of these particular works in Latin and Greek, any equivalent will be accepted.

For admission to the first year of the Scientific Course, the requirement is the same as for the Classical Course, omitting the ancient languages.

Candidates for advanced standing are also examined in the studies to which the class they propose to enter have attended.

Candidates for admission into the Normal Department must pass a satisfactory examination in the Outlines of Geography, Elements of Grammar, and Arithmetic to Proportion.

Such as desire to pursue a select course will be admitted to any of the recitations for which they may be prepared.

Applicants for admission must present testimonials of good moral character. Students are received from other States.

DEGREES.

Those who have satisfactorily completed the Classical Course are entitled to the Degree of *Bachelor of Arts.*

Those who have satisfactorily completed the Scientific Course are entitled to the Degree of *Bachelor of Philosophy.*

Those who have completed satisfactorily the course in the Normal Department, are entitled to a diploma of graduation, under seal of the University.

LITERARY SOCIETIES.

The Literary Societies, the Hesperian and Athenæan, are valuable aids in the intellectual training of the student. Each has a library of several hundred volumes.

Spacious and commodious rooms have been provided and furnished, and are now occupied by these Societies, in University Hall.

MERIT ROLL.

A permanent record is kept of the daily attendance, conduct and recitations of each student; and information of his standing communicated from time to time to his parent or guardian.

RELIGIOUS EXERCISES.

The students are assembled at prayers daily in the chapel of the University, fifteen minutes before the morning hour for commencing study and recitation.

ACCOMMODATIONS.

University Hall, costing more than $65,000, contains commodious public rooms for recitation, lecture, library, cabinets, &c. There are also two large buildings provided with pleasant study and lodging rooms for students, and apartments for boarding, &c.

ROOMS, &c.

Private rooms in the University, under certain restrictions, can be secured by application to the locating officer.

No student will be allowed to occupy a room until his bills for the term are settled.

Students in the regular University classes, in previous occupancy, will be allowed to retain their rooms, if on the ground at the opening of the term.

Students from abroad, admitted to the University classes, and intending to complete the Classical or Scientific course, are allowed the choice of rooms.

Rooms are furnished at the expense of the students, who should bring their own bedding, towels, &c.; other furniture can be obtained here second-hand, or new, at moderate prices.

Occupants of rooms are held responsible for all damages to the same.

Students not accommodated in the University, and not residing with their parents in Madison, will lodge and board in town, under such regulations as the Faculty may prescribe.

Students of suitable age, in the Preparatory and Commercial Departments, are allowed to occupy private rooms in the University Building.

LIBRARY, CABINETS, &c.

The University Library comprises about three thousand volumes.

This institution is provided with valuable Geological and Mineralogical Cabinets and Collections in Natural History; also with well selected Philosophical and Chemical Apparatus.

TERMS AND VACATIONS.

The Commencement Anniversary is on the last Wednesday of June, and is followed by a vacation of nine weeks.

There are three terms of thirteen weeks each in the year; and three vacations, one of nine, and the other of two weeks each.

The First Term, therefore, opens on Wednesday, nine weeks from Commencement; and each of the other terms on Wednesday, two weeks from the close of the preceding term.

First Term commences August 26th, 1863, and closes November 24th, 1863.

Second Term commences Dec. 9th, 1863, and closes March 9th, 1864.

Third Term commences March 23d, 1864, and closes June 25th, 1864.

Commencement Anniversary, Wednesday June 25th, 1864.

Anniversary of Literary Societies—evening before Commencement.

Society Exhibition—close of First Term.

Alumni Address and Meeting—evening of Commencement day.

EXPENSES.

University charge (for tuition, room and heat) per term,	$10 50
Tuition, without private room, per term,	6 00
Tuition, for less than a whole term, per week,	60
Room-rent and fuel, for less than a term, per week,	50
Commercial course, (time unlimited) in advance,	30 00
Board in University Building, per week,	1 75
do private families,	$2 to 2 50
Washing, per dozen,	50

Students will be charged for not less than half a term, except in case of sickness.

No deduction, from University charges, will be made for absence during the last two weeks of the term, except in case of sickness.

Students are furnished with board in the family of one of the Professors residing in one of the University Buildings.

Many students board themselves in their rooms for less than $1 per week.

Payment of University charges is required strictly *in advance*.

There are no extra charges except for actual damages by students.

It is the object of the University to afford the youth of the State the best education, both Scientific and Practical, and at the lowest rates.

At no similar institution in the land are the expenses of education less than in the University of Wisconsin.

The location of the Institution, it is well known, is among the most beautiful and healthy any where to be found.

ANNUAL REPORT

OF THE

BOARD OF REGENTS

OF THE

UNIVERSITY OF WISCONSIN,

FOR THE YEAR ENDING SEPTEMBER 30, 1864.

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ANNUAL REPORT

OF THE

BOARD OF REGENTS

OF THE

UNIVERSITY OF WISCONSIN,

FOR THE YEAR ENDING SEPTEMBER 30, 1864.

To the Legislature of the State of Wisconsin:

The Board of Regents of the University of Wisconsin respectfully submit their report for the year ending September 30, 1864.

I. INTERNAL CONDITION OF THE UNIVERSITY.

During the year two of the departments defined in the act under which the University is organized, have been in operation, to wit, the "Department of Literature, Science and the Arts," and that of the "Theory and Practice of Elementary Instruction." The description given in our last report of the former department, so far as it has yet been developed in the University, is still applicable. Two courses of study for students of college grade are provided in that department, called respectively, the "Classical" and the "Scientific." The former is distributed over a period of four years, and is identical with the regular curriculum of the American college. The latter is designed to occupy but three years, and includes the English studies of the former, together with the French and German languages. Graduates of the former course receive the degree of Bachelor of Arts; those of the latter, the degree of Bachelor of Philosophy. A large proportion of those who take the degree last mentioned, however, pursue either the whole or a large part of the regular curriculum in the Latin language and literature. A Preparatory School is also maintained in connection with this department, designed to furnish the mathematical and classical training required for admission to the college classes. The second department above named, which may be otherwise denominated the University Normal School, provides for a course of study extending over a period of three years, and specially adapted to the wants of those who are qualifying themselves as teachers of our public schools. The larger part of the instruction in the Normal course is given by the Principal of that department and the preceptress, with an assistant female teacher; but the pupils have also instruction in special classes formed for them by the college professors, and have access, without extra charge, to the lectures and recitations of the college and preparatory classes.

There is also a Commercial School maintained in the city, which has a nominal connection with the University.

The whole number of different students in attendance upon the University during the last academic year, (not including the Commercial School) was three hundred and sixty-one (361); of whom 181 were gentlemen, and 180 ladies. This is the largest number ever reported as in attendance during the same length of time. Of these, 42 were members of college classes, 16 being engaged upon the "Classical Course," and 26 upon the "Scientific Course;" 60 were pursuing the regular Normal course; 50 were members of the Preparatory School; and 209 were Irregulars, i. e. students who did not devote themselves to either of the regular courses, but pursued select studies.

The statistics of attendance for the several terms composing the academic year are as follows: Fall term (1863), whole number, 229; Gentlemen, 110; Ladies, 119. Winter term (1863-4), whole number, 182; Gentlemen, 96; Ladies 86. Spring term (1864), whole number, 184; Gentlemen, 101; Ladies, 83.

More detailed information in reference to the faculty, students, courses of study, methods of instruction and discipline of the University, will be found in Appendix C.

II. UNIVERSITY BUILDINGS.

Of the three buildings which have been erected for the uses of the institution, the central edifice, which is upon the summit of the hill, and is denominated "University Hall," is devoted entirely to lecture and recitation rooms, chapel, Normal School room, society halls, cabinet, library, chemical laboratory and other public rooms. It is one of the largest buildings of the kind in the West, and will furnish ample accommodations for most of the public uses of the institution after it shall come to have three times the number of students that have ever yet been in attendance upon it at any one time. The other two buildings are used for the residence of students and a portion of the faculty. The "North Dormitory" is occupied entirely by young gentlemen; the "South Dormitory" mostly by young ladies, but with rooms appropriated to the families of the Dean of the University faculty, and the Principal of the Normal department, and to a Boarding Hall under the charge of the latter officer. These two buildings are entirely filled.

III. MEETINGS OF THE BOARD.

The Board of Regents met twice during the year. The winter meeting was held on the 20th and 21st of January. There were present Regents Barron, Conover, Fairchild, Pickard, Stewart, Vilas and Worthington. The Executive Committee submitted a report of its proceedings during the recess of the Board. The some committee, in accordance with previous instructions, submitted a revision of the By-Laws and Ordinances of the

Board, which, after being amended, was adopted and ordered to be printed. Prof. J. W. STERLING, as Dean of the Faculty, presented a report of the condition and wants of the institution, A committee of gentlemen, not members of the Board, was appointed to attend the annual examination of the University classes. Regent FAIRCHILD was appointed a member of the Executive Committee to fill a vacancy created by the expiration of the term of Hon. J. T. LEWIS as Secretary of State and *ex officio* Regent.

The summer meeting was held on the 28th of June. There were present Regents Conover, Davis, Fairchild, Pickard, Salomon, Vilas and Worthington. The usual annual reports were received from the Dean of the Faculty, the several professors, and the Executive Committee. The members of the senior class (with one exception) having left the State, along with many other students of the University, as volunteers in the 40th Regiment of Wisconsin Infantry (one hundred day men), no commencement was held. The Executive Committee were authorized to provide for commencement exercises on the return of the class, if it should then appear advisable; and if not, the President of the Board and the Dean of the Faculty were authorized to prepare and deliver diplomas to the graduating class. The degree of Bachelor of Arts was directed to be conferred upon JAMES LAMBERT HIGH and WASHINGTON IRVING WALLACE, and the degree of Bachelor of Philosophy upon EUGENE M. CONGAR, AUGUSTUS H. SALISBURY and JOHN COIT SPOONER.

A committee, consisting of Regents Salomon, Conover and Pickard, was appointed to make inquiries in reference to obtaining a suitable person for the office of chancellor, and directed to report at the next meeting of the Board. The Executive Committee were authorized to employ a Principal of the Preparatory School at a salary not exceeding $1000. The undersigned were appointed a committee to prepare the annual report of the Board to the legislature.

These are the principal items of business transacted at the meetings of the Board. By the By-Laws, the Executive Committee are required, in the recess of the Board, to "provide for the execution of all orders and resolutions not otherwise specially committed—fill vacancies happening during recess—audit accounts, and generally take care that the institution take no detriment." A separate register of the doings of this committee is directed to be kept by the secretary, to be submitted from time to time to the Board for its final action; and it is provided that the committee shall meet statedly on the first Monday in each month. From the minutes of the committee it appears that they held twelve meetings during the year.

For a statement of the persons composing the Board during the year, and of its officers and committees, reference is made to Appendix C.

IV. FINANCIAL STATEMENT.

From the books in the office of the Secretary of State it appears that the receipts of the University Fund Income, during the year under review, after deducting the amount refunded, and the amount overpaid the University Treasury on the 30th of September, 1863, were.......... $10,779.92

The changes made by the State were as follows:

For clerk hire	$965.00	
For printing	38.44	
To appraisers of forfeited mortgage land	54.35	
Total charges	$1,057.79	
Paid University Treasurer	8,549 01	
Balance Sept. 30, 1863	1,173.12	
		$10,779.92

The receipts into the University treasury from the Income Fund were as follows:

From the State Treasurer	$8,549.01
Balance Sept. 30, 1863	2,696.29
Total	$11,245.30

The current expenditures were as follows:

Salaries of Professors and Tutor		$6,337.50
Salary of Secretary		100.00
Salary of Janitor		360.00
Incidental expenses and repairs		1,577.33
Insurance		405.75
Wood		939.50
Interest on Ledyard loan	$494.81	
" loan from School Fund	99.01	
		593.82
Total Expenditures		$10,313.90
Balance Sept. 30, 1864		931.40
		$11,245.30

For a more detailed statement of receipts and expenditures, reference is made to Appendixes A and B, being the reports of the Treasurer and Secretary.

The following is an approximate estimate of receipts and expenditures for the current fiscal year:

Interest on the productive fund, less the State charges		$10,000.00
Balance in State Treasury, Sept. 30, 1864		1,173.12
Balance in University Treasury, Sept. 30, 1864		931.40
Total Resources		$12,104.52
Salaries of Instructors	$6,400.00	
" Secretary	100.00	
" Janitor	400.00	
Insurance	405.75	
Wood	1,500.00	
Library, Cabinet and Miscellaneous	1,500.00	
		10,305.74

The indebtedness of the University on the 30th of September, 1863, for moneys borrowed by authority of law for the erection of its buildings, was as follows:

Due the School Fund	$19,000.00
Due J. D. Ledward	5,000.00
Total	$24,000.00

During the last fiscal year this indebtedness was paid with moneys transferred for that purpose from the principal of the University Fund, in accordance with chapter 268, Laws of 1862. The University is now completely free from debt. The condition of its Principal Fund on the 30th of September, 1864, as appears by the report of the Secretary of State, was as follows:

Amount due on sales of lands held on certificate	$127,563.25
Amount due on loans secured by mortgage	18,607.00
Amount due on bonds and certificates of indebtness of the State	11,000.00
Total productive fund	$157,170.25

Of the lands with which the institution was originally endowed by the government of the United States, there are now on hand about 40,000 acres; of which some 17,000 acres have never been sold, and the remainder have been forfeited and not resold.

The productive fund above stated, bearing interest at seven per cent., will yield a gross income of $11,001.91. But under existing laws even this slender sum will be subject to a reduction of about $1000 on account of charges made by the state for administering the fund. We cannot conclude this report without once more inviting the attention of the legislature to the question, whether it would not be more creditable to the State to administer the grant bestowed upon it by the munificence of the Federal Government, for the purpose of building up and maintaining a State University, without making these charges. The institution under our care greatly needs a chancellor, and large additions to its library and its means of illustration and experiment in the natural sciences. It cannot afford to obtain or retain any other than able and experienced teachers in any of its chairs of instruction, and it ought to be able to offer such men salaries somewhat adapted to the enormous advance in the cost of living. A remission of the State charges against the fund, while it would not give us the means to accomplish all the objects named, or other important objects desired by the Board, would yet secure a material addition to our resources.

In conclusion, the attention of the legislature is called to the fact that the term of office of the following members of the Board expires on the 1st of January, 1865, to wit: O. M. CONOVER, of Madison; MOSES M. DAVIS, of Appleton; NELSON DEWEY, of Cassville; and HARRISON C. HOBART, of Chilton,

In behalf of the Board.

D. WORTHINGTON,
LEVI B. VILAS, } Committee.
LUCIUS FAIRCHILD,

APPENDIX "A."

TREASURER'S REPORT.

To the Honorable Board of Regents of the University of Wisconsin:

Your treasurer respectfully submits this, his annual report, containing a detailed statement of the receipts and disbursements of his office for the fiscal year ending 30th ultimo, from which it will appear that I have received from all sources $36,208 40 and paid out $35,229 68, leaving in the treasury a balance of $978 81.

TIMOTHY BROWN,
Treasurer.

MADISON, WIS., Oct 1st, 1864.

REPORT of Receipts and Disbursements by the Treasurer of University of Wisconsin from October 1st, 1863, *to the* 30*th of September*, 1864, *inclusive.*

RECEIPTS.

Date.		Amount.
1863.		
Oct 1	Balance on hand....................................	$2,612 07
Dec 2	State Treasurer, Principal Fund............................	5,000 00
1864.		
Feb 24	....do.................do................................	9,000 00
" 24	....do.........Rebate Interest............................	47 41
Mar 25	....do.........Income Fund............................	2,000 00
Apr 9	....do.................do................................	450 00
" 9	....do.........Principal Fund............................	1,000 00
" 12	....do.................do................................	5,000 00
" 12	....do.........Income Fund............................	99 01
May 28	....do.................do................................	1,000 00
" 28	....do.........Principal Fund............................	5,000 00
June 25	....do........ Income Fund............................	5,000 00
	Total Receipts....................................	$36,208 49

DISBURSEMENTS.

Date.	To Whom Paid.	No. of V'cher	Amount.
1863.			
Oct 15	J W Sterling..	1350	$300 00
Nov 14	S H Smith..	1351	100 00
" 18	J M Haight..	29	92 00
" 25	W P Tower..	30	128 08
" 25	J W Sterling..	31	250 00
" 27	....do..	1352	250 00
" 27	Faculty..	1353	31 50
Dec 3	S H Smith..	1354	100 00
" 22	State Treasury..	32	5,000 00
" 31	J D Butler..	1356	225 00
" 31	Daniel Reed..	1357	225 00

APPENDIX "A."—continued.

Date.		To Whom Paid.	No. of V'cher	Amount.
1864.				
Jan	2	J P Fuchs	1359	$225 00
"	2	J D Parkinson	1361	125 00
"	4	C H Allen	1360	125 00
"	4	Pat Walsh	1368	75 00
"	5	S H Smith	1364	250 00
"	5	E S Carr	.....	75 00
"	6	D H Tullis	1362	25 00
"	7	J W Sterling	1355	225 00
"	23	S H Smith	1365	115 50
Feb	2	J W Sterling	1366	200 00
"	4	C S Mears & Co	1367	22 50
"	6	A Burgess	38	17 50
"	6	Faculty	1368	31 50
"	12	C H Allen	1369	112 50
"	18	J W Sterling	1370	180 00
"	24	T Brown, treasurer	34	9,000 00
Mar	12	W J Park & Co	1371	10 00
"	31	D H Tullis	1379	25 00
Apr	1	J W Sterling	1372	225 00
"	1	D Read	1373	225 00
"	1	J D Butler	1375	225 00
"	1	J P Fuchs	1374	225 00
"	1	E S Carr	1376	225 00
"	1	C H Allen	1377	125 00
"	1	J D Parkinson	1378	125 00
"	1	Pat Walsh	1380	75 00
"	4	T Brown, treasurer	1381	351 75
"	9	J W Sterling	1382	450 00
"	9	J W Sterling	35	150 00
"	12	T Brown treasurer	1384	99 01
"	12	T Brown...do	36	5,000 00
"	23	Faculty	1384	31 50
"	23	J W Sterling	1385	34 50
ay	7	S H Smith	1386	100 00
"	21	T Brown, treasurer	1387	225 75
une	1	T Brown,...do	1389	148 06
"	1	T Brown,...do	37	5,000 00
"	3	J D Noble	1388	59 50
"	28	J W Sterling	1390	100 00
"	28	Daniel Reed	1392	100 00
"	30	J W Sterling	1396	225 00
"	30	J D Butler	1397	225 00
"	30	D H Tullis	1403	25 00
	30	Pat Walsh	1404	105 00
	30	E S Carr	1393	100 00
	30	E S Carr	1398	225 00
"	30	J D Butler	1391	100 00
"	30	J P Fuchs	1394	100 00
"	30	Daniel Reed	1399	225 00
	30	J P Fuchs	1400	225 00
ly	11	J W Sterling	38	278 26
"	11	J W Sterling	1405	221 74
"	12	C H Allen	1401	175 00
	12	C H Allen	1395	100 00

Date.	To Whom Paid.	No. of V'cher	Amount.
1864.			
July 18	Journal Office	1405	$5 50
" 18	Journal Office	1407	20 00
Aug. 18	J D Parkinson	1402	125 00
" 18	W H Wyman, agent	1408	180 00
Sept 30	D H Tullis	1416	25 00
" 30	O V Tousley	1415	250 00
" 30	J D Butler	1411	225 00
" 30	J P Fuchs	1413	225 00
" 30	J W Sterling	1409	225 00
" 30	C H Allen	1414	225 00
" 30	Daniel Reed	1410	225 00
" 30	E S Carr	1412	225 00
" 30	Pat Walsh	1417	105 00
" 30	Balance to new account		978 81
	Total		$36,208 49

REPORT OF THE AUDITING COMMITTEE.

MADISON, Wis., Sept. 30, 1864.

We have examined the books and vouchers of T. Brown, Treasurer of the University of Wisconsin, and compared them with the books, accounts and warrants of the Secretary of the Board for the fiscal year ending this date, and find that there is a balance in the hands of the Treasurer belonging to the University of nine hundred seventy-eight dollars and eighty-one cents.

J. L. PICKARD,
Pre't of the Board of Regents.
D. H. TULLIS,
Sec'y of the Board of Regents.

Auditing Committee
of the University
of Wisconsin.

"B."

SECRETARY'S REPORT.

Madison, October 1, 1864.

To the Board of Regents of the University of Wisconsin:

The Secretary of the Board of Regents respectfully reports, that during the fiscal year ending on the 30th day of September ultimo, warrants have been drawn upon the Treasurer of the Board, as follows, to wit:

ON THE INCOME FUND.

Date.	To whom issued, and what for.	Amount.
1863.		
Oct. 12	Prof. J. W. Sterling, advance for incidental expenses	$300 00
Nov. 14	S. H. Smith, wood	100 00
.. 25	Prof. J. W. Sterling, advance for incidental expenses	250 00
.. 25	Faculty of University, bell ringing, &c	31 50
Dec. 3	S. H. Smith, wood	100 00
.. 31	Prof. J. W. Sterling, salary	225 00
.. 31	" J. D. Butler,....do	225 00
.. 31	" Daniel Read ....do	225 00
.. 31	" E. S. Carr......do	75 00
.. 31	" J. P. Fuchs.....do	225 00
.. 31	" C. H. Allen.....do	125 00
.. 31	J. B. Parkinson, Tutor.do	125 00
.. 31	D. H. Tullis, Secretary.do	25 00
.. 31	Patrick Wash, Janitor do	75 00
1864.		
Jan'y 5	S. H. Smith, wood	250 00
.. 22	....do.......do	115 50
Feb. 2	Prof. J. W. Sterling, advance for incidental expenses	200 00
.. 4	C. S. Mears, lumber	22 59
.. 6	Faculty, bell ringing, &c	31 50
.. 12	Prof. C. H. Allen, salary	112 50
.. 18	" J. W. Sterling, wood	180 00
.. 27	W. J. Park & Co., printing	10 00
Mar. 31	Prof. J. W. Sterling...salary	225 00
.. 31	" Daniel Read.......do	225 00
.. 31	" J. P. Fuchs ....do	225 00
.. 31	" Jas. D. Butler.....do	225 00
.. 31	" E. S. Carr.........do	225 00
.. 31	" C. H. Alleu.......do	125 00
.. 31	J. D. Parkinson, Tutor...do	125 00
.. 31	D. H. Tullis, Secretary...do	25 00
.. 31	Patrick Walsh, Janitor...do	75 00
Apr. 4	T. Brown, Treasurer, interest on Ledyard loan	351 75
.. 9	Prof. J. W. Sterling, advance for incidental expenses	450 00

Secretary's Report—continued.

Date.	To whom issued, and what for.	Amount.
1864.		
Apr. 12	T Brown, Treasurer, interest on loan from school fund........	$99 01
.. 23	Faculty, bell ringing, &c..................................	31 50
.. 22	Prof. J. W. Sterling, wood.................................	34 50
May 7	S. H. Smith..........do....................................	100 00
.. 21	T. Brown, Treasurer, insurance............................	225 75
June 1	........do..........interest on Ledyard loan...............	143 06
.. 3	J. D. Noble, wood...	59 50
.. 28	Prof. J. W. Sterling...salary.............................	100 00
.. 28	" J. D. Butler.......do.................................	100 00
.. 28	" Daniel Read.......do.................................	100 00
.. 28	" E. S. Carr.........do.................................	100 00
.. 28	" J. P. Fuchs.......do.................................	100 00
.. 28	" C. H. Allen........do.................................	100 00
.. 30	" J. W. Sterling.....do.................................	225 00
.. 30	" J. D. Butler.......do.................................	225 00
.. 30	" E. S. Carr........do.................................	225 00
.. 30	" Daniel Read......do.................................	225 00
.. 30	" J. P. Fuchs.......do.................................	225 00
.. 30	" Chas. H. Allen....do.................................	175 00
.. 30	" J. D. Parkinson, Tutor, salary........................	125 00
.. 30	D. H. Tullis, Secretary........do.........................	25 00
.. 30	Patrick Walsh, Janitor.......do...........................	105 00
July 11	Prof. J. W. Sterling, advance for incidental expenses..........	221 74
.. 18	State Journal, printing....................................	8 50
.. 18	.....do........do...	20 00
Aug. 1	W. H. Wyman, insurance....................................	180 00
Sept. 30	Prof. J. W. Sterling...salary.............................	225 00
.. 30	" Daniel Read.......do.................................	225 00
.. 30	" Jas. D. Butler.....do.................................	225 00
.. 30	" E. S. Carr.........do.................................	225 00
.. 30	" J. P. Fuchs.......do.................................	225 00
.. 30	" Chas. H. Allen.....do.................................	225 00
.. 30	O. V. Tousley, Tutor.....do................................	250 00
.. 30	D. H. Tullis, Secretary...do...............................	25 00
.. 30	Patrick Walsh, Janitor ..do...............................	105 00
		$10,318 90

Secretary's Report—continued.

ON PRINCIPAL FUND.

(See Chapter 268, General Laws of 1862.)

Date.	To whom issued, and what for.	Amount.
1863.		
Nov. 18	J. Mason Haight, school desks, normal department	$92 00
.. 25	W. P. Towers, painting cabinet, &c	128 02
.. 25	Prof. J. W. Sterling, advance for permanent improvements	250 00
Dec. 22	T. Brown, Treasurer, payment on loan from school fund	5,000 00
1864.		
Feb. 3	A. Burgess, sash for cabinet	17 50
.. 24	T. Brown, Treasurer, payment on loan from school fund	9,000 00
Apr. 9	Prof. J. W. Sterling, advance for permanent improvement	150 00
.. 12	T. Brown, Treasurer, payment on loan from school fund	5,000 00
June 1	T. Brown, Treasurer, payment on Ledyard loan	5,000 00
July 11	Prof. J. W. Sterling, advance for permanent improvements	278 26
		24,915 78

The foregoing lists of warrants issued during the last fiscal year, may be appropriately classified as follows:

INCOME FUND.

Salaries of Professors		$6,837 50
Salary of Secretary		100 00
Salary of Janitor		360 00
Incidental expenses and repairs		1,577 88
Insurance		405 75
Wood		939 50
Interest on Ledyard loan	$494 84	
Interest on loan from school fund	99 01	
		593 82
		$10,318 90

PRINCIPAL FUND.

Payment of loan from school fund	$19,000 00
Payment of loan from J. D. Ledyard	5,000 00
Furniture for normal department	92 00
Permanent improvements on buildings	823 78
	$24,915 78

D. H. TULLIS,
Secretary of the Board of Regents.

ANNUAL REPORT

OF THE

BOARD OF REGENTS

OF THE

UNIVERSITY OF WISCONSIN,

FOR THE YEAR 1865.

WILLIAM J. PARK, STATE PRINTER—WISCONSIN CAPITOL OFFICE.

956 P

ANNUAL REPORT

OF

Board of Regents of the University of Wisconsin,

FOR THE YEAR 1865.

MADISON, September 30, 1865.

His Excellency, JAMES T. LEWIS,
Governor of Wisconsin:

Sir:—I have the honor to transmit herewith the annual report of the Board of Regents for the year ending September 30, 1865.

I am very respectfully,
Your obedient servant,
JOHN G. McMYNN,
President of the Board.

REPORT OF REGENTS.

To the Legislature of the State of Wisconsin:

The Board of Regents of the University of Wisconsin respectfully submit their report for the year ending September 30th, 1865.

I.—INTERNAL CONDITION OF THE UNIVERSITY.

The two departments of which the University now consists are designated by law, respectively, as that of "Science, Literature and the Arts," and that of the "Theory and Practice of Elementary Instruction." The character and aims of these departments have been described in former reports of the Board. During the year past they have been in operation without material change, either in the Faculties of instruction or in the several courses of study.

The last academic year of the institution ended upon the last Wednesday of June, 1865. The whole number of students in attendance during that year was 306; of whom 169 were gentlemen, and 137 ladies. Of this whole number, 41 were members of the regular college classes, 19 being engaged upon the classical, and 22 upon the scientific course. As in previous years, it is represented by the Faculty that a large proportion of those who pursue the scientific course of sudy, read also a part or the whole of the Latin prescribed for students of the classical curriculum. The remaining 265 students are classified by the Vice Chancellor as follows: Students in Normal Classes, 66; in Preparatory Classes, gentlemen, 44—ladies, 53; in Select Course, gentlemen, 44—ladies, 18.

For more detailed information in reference to the Faculty, students, courses of study, methods of instruction and discipline of the University, the fees charged to students, the provision made for their accommodation with board, the Literary Societies existing in connection with the institution, the libraries, cabinet and apparatus, and the calendar of the academic year ending on the last Wednesday of June, 1866, reference is made to Appendix D.

The two persons who composed the first graduating class in the University received their degree at the commencement in July, 1854. The whole number of graduates in the department of "Science, Literature and the Arts," up to the present time, is fifty-three. The first graduating class in the Normal Department, consisting of six young ladies, received from the institution their certificates of graduation at the last annual commencement.

II.—FINANCIAL STATEMENT.

The receipts of the University Fund Income during the year, as appears from the books in the office of the Secretary of State, were as follows:

Interest,	$11,757 77
Balance Sept. 30th, 1864,	1,173 12
	$12,930 89

The charges made by the state were as follows:

For clerk hire,	$900 00	
For appraisement of forfeited mortgaged lands,	7 65	
For advertising,	24 20	
For printing,	44 64	
For mileage of regents,	88 80	
Total state charges,		$1,060 29
Amount refunded,		1,858 10
Paid University,		10,800 00
Balance Sept. 30th, 1865,		212 50
		$12,980 89

The receipts into the University treasury during the same period were as follows:

From State Treasurer,	$10,800 00
Insurance,	30 00
Balance Oct. 1st, 1864,	978 81
Total,	$11,808 81

The expenditures were as follows:

Salaries of Professors,	$6,050 00
Salary of Secretary,	100 00
Janitor services,	675 00
Carpenter,	842 50
Assistant Librarian, Bell Ringer and Meterorological Observer,	94 50
Stoves, pipe, thimbles, dampers, &c.,	560 21
Fuel,	2,762 09
Insurance,	405 00
Interest,	89 68
Furniture,	75 00
Printing,	808 51
Music and printing for commencement,	40 00
Other contingent expenses,	1,689 79
	$13,187 28
	11,808 81
Overdrawn Sept. 30th, 1865,	$1,378 47

In our last annual report we estimated the expenditures of the year under review, as nearly as we could with the data then before us, as follows:

Salaries of Instructors,	$6,400 00
Secretary,	100 00
Janitor services,	400 00
Insurance,	405 75
Wood,	1,500 00
Library, cabinet and miscellaneous,	1,500 00
	$10 305 75

It will be seen that the actual expenditure was $2,831 53 in excess of this estimate. Of this amount $1,262 09 was for the item of fuel alone, that being the difference between the estimated and the actual expense for that article. This difference was partly due to the unexpectedly high price of fuel, and partly to the fact that a larger quantity of wood was purchased than was required for the year, and sufficient in fact, it is believed, to meet the wants of the institution, in that respect, during the present fiscal year. Between five and six hundred dollars were also drawn from the treasury near the close of the year for the purchase of stoves, pipe and other accompaniments, in pursuance of a resolution of the Board, directing a change in the mode of heating the dormitory buildings, by discontinuing the use of furnaces, supplying the rooms with stoves and requiring students to furnish their own fuel. This change was made just in time to throw the chief burden of expense, resulting from it, upon the last fiscal year, while the benefits expected from it could only accrue in subsequent years. The Board confidently believe that the measure will result in a very considerable reduction of the contingent expenses of the University in future. Notwithstanding the unfavorable financial condition under which the Board have commenced the present fiscal year, with the University treasury overdrawn, as above shown, to the amount of $1,828 47, it is believed that, with rigid economy, both this sum and all the necessary expenses of the institution can be paid out of the income of the year.

The condition of the University Fund on the 30th of September, 1863, as appears from the books in the office of the Secretary of State, was as follows:

Amount due on lands sold on certificates,	$96,870 55
Amount due on mortgages,	10,910 00
Amount due on bonds and certificates of indebtedness,	53,000 00
Total productive fund,	$160,780 55

There were on hand at the same time, as appears from the books in the office of the Commissioners of School and University

Lands, 26,484 acres of unsold and forfeited lands; of which, 5,945 acres had never been sold, and 20,539 acres had been forfeited and not re-sold. It also appears that there was due to the University Fund, at that date, on forfeited mortgaged lands, $5,876 88. This Board has no means of judging accurately either as to the value of the lands still on hand, or as to the amount likely to be realized upon forfeited mortgaged lands. The sales and forfeitures of University Lands during the last two fiscal years are stated as follows:

Sales, 1864,............	2,930.23	acres, sold for..................................	$8,202 89
1865,............	3,871.62	...do......do	9,081 12
	6,801.85		$17,284 01
Forfeitures, 1864,.....	2,953.04	acres, amounting to,.........................	$8,754 16
1865,.....	939.88	...do......do..	2,526 00
	3,892.92		$11,280 16

III.—ORGANIZATION AND MEETINGS OF THE BOARD.

On the 1st of October, 1864, in addition to the Secretary of State and Superintendent of Public Instruction, who were *ex officio* members, the board consisted of the following persons, elected by the Legislature: Levi B. Vilas, D. Worthington, George B. Eastman, Henry D. Barron, M. Frank, John W. Stewart, Theodore Prentiss, Edward Salomon, O. M. Conover, Moses M. Davis, Nelson Dewey, and Harrison C. Hobart. On the 1st of January, 1865, the term of the four Regents last named expired, and the following persons were appointed by the Governor to fill the vacancies thus created: O. M. Conover, D. H. Muller, G. W. Hazleton and H. S. Magoon. By section 5, chapter xxi., R. S., the Regents so appointed were to continue in office until the expiration of the session of the Legislature then about to convene, and until others were elected in their stead. During the session of the Legislature, the following persons were elected Regents instead of the four above named: D. H. Muller, Moses M. Davis, H. P. Strong and Charles Thayer. On the 27th of June, 1865, John W. Stewart resigned his seat in the Board, and O. M. Conover was appointed by Acting Governor Spooner, to fill the vacancy thus created.

During the year, the Board, in accordance with the provisions of its By-Laws, held two meetings. At the first, held January 18, 1865, there were present, Regents Conover, Fairchild, Hazleton, McMynn, Muller, Vilas and Worthington. Reports were received from the Dean of the Faculty, the Executive Committee, and the Committee on the Library. Professor Charles H. Allen tendered his resignation of the professorship of the "Theory and Practice of Elementary Instruction," to take effect at the close of the academic year; and it was accepted.

At the second meeting of the Board, held on the 27th and 28th of June, 1865, there were present, Regents Conover, Davis, Eastman, McMynn, Muller, Strong, Vilas and Worthington.

A communication from the Faculty was read by Prof. Read, relating to the condition and prospects of the University, and the best means of securing its permanent success and prosperity. This commmunication was subsequently ordered by the Executive Committee to be published, and will be found in appendix "C."

The Executive Committee made a full report of their action during the recess of the Board, and recommended various measures for its consideration. The usual annual reports were also received from the Dean of the Faculty, the several Professors, and the Principal of the Preparatory Department.

Pursuant to a recommendation of the Faculty, the Board voted to confer the degree of Bachelor of Arts upon Philip Stein and James Byrne; that of Bachelor of Philosophy upon John Meader Jones, Charles Harrison Vilas, Joseph Dwight Tredway and George H. Pradt; and that of Master of Arts upon James B. Brittan, Henry Vilas, John D. Parkinson, William E. Spencer, William W. Church and S. Izaiah Hall, of the class of 1861, and Michael Leahy, of the class of 1862. A certificate of graduation in the normal Department, under the seal of the University, was also directed to be conferred upon the following young ladies: Mary A. Allen, Clara J. Chamberlain, Annie E. Chamberlain, Hattie M. Rusk, Lydia Sharp and Annie E Taylor.

Hon. J. L. Pickard, formerly Superintendent of Public Instruction in this state, and now of Chicago, was elected Chancellor of the University. Subsequently Mr. Pickard declined the position thus tendered him. No election has since been had to fill the vacancy in the office of Chancellor.

In accordance with a recommendation of the Executive Committee (to whom the subject had been referred at the previous meeting), the Board agreed to purchase of Prof. Read, for $1000, a parcel of land lying within the University enclosure, and necessary to the convenience and symmetry of the grounds; and the Executive Committee were directed to complete the arrangement.

The board further resolved to discontinue the use of furnaces in heating the two Dormitory Buildings, and directed the Executive Committee to supply the buildings with stoves. It also directed that students should hereafter be required to provide fuel for their private rooms; and that the Executive Committee should re-arrange the schedule of fees to be paid by students, in view of this change in the mode of heating.

The salaries of professors, payable from the Income Fund, was fixed at $1000; the provision for dividing the amount of fees received from students among the professors being left without change. The salary of the Preceptress in the Normal Department was fixed at $600.

The office of Dean of the Faculty was abolished, and that of Vice Chancellor substituted. An election of certain officers for two years was held in accordance with the By-Laws of the Board, and the following persons were elected: Vice Chancellor, J. W. Sterling; Treasurer, Timothy Brown; Secretary, D. H. Tullis; Librarian, J. W. Sterling. The following committees were appointed for the same term: Executive Committee, Regents McMynn, Fairchild, Vilas, Worthington and Conover; Library Committee, Regents Conover, Eastman and Worthington:

It was resolved that the Preparatory Department should be placed under the supervision of the Principal of the Normal Department, and that instruction therein should be given by the members of the Faculty, under the direction of the Vice-Chancellor. The design and effect of this resolution was to abolish the separate office of Principal of the Preparatory Department, and to save the treasury of the institution the sum of $1,000, which was the amount of salary paid to such Principal during the previous academic year.

The following resolution was also adopted:

"*Resolved*, That the Vice-Chancellor be, and hereby is, requested to furnish to the Executive Committee, at least one month before the close of each term, a statement or programme in detail of the studies to be pursued and the lectures to be given in the University during the following term, and which shall embrace the following points: 1. The subjects of study and lecture. 2. The hours of the day of recitations and lectures. 3. Text books required by students. 4. The conditions of admission to the respective classes. 5. The names of the Professors of the respective branches, and the names of the instructors in the various classes. 6. Such other information in regard to instruction, discipline, board, etc., as he may deem proper."

A 7–30 bond of the United States for one hundred dollars having been donated to the University by the Hon. Jas. T. Lewis, on the 18th of February, 1865, with a request that the interest thereon might be used each year "in procuring a suitable silver or gold medal, to be presented to the student whom the professors should designate as having made the greatest mental and moral improvement during the year preceding its presentation," the Executive Committee were directed by the Board to procure a suitable die for striking such medal.

These are the most important items of business transacted at the meetings of the Board.

The Executive Committee, which sits in the recess of the Board, is charged with auditing accounts for contingent expenses, and with the execution of all orders and resolutions of the Board not otherwise specially committed. It appears from the records of this committee, that it held, during the year, seventeen meetings. On the 8th of August, 1865, under special authority conferred by the Board, it appointed Charles H. Allen to fill, during the Fall Term, the vacancy created by his own resignation of the professorship of the "Theory and Practice of Elementary Instruction;" Professor Allen contemplating a permanent withdrawal from the institution at the close of that term.

In conclusion, the Board respectfully invite the attention of the Legislature to the fact that the annual charges made by the State against the income of the University Fund for the management of the same—a fund bestowed by the General Government upon Wisconsin for the education of her own children—amounts to between *nine* and *ten* per cent. of that income. It is a part of the glory of our sister states, and of most civilized communities, that their institutions for the higher learning have cost them something. Is it to be a part of the permanent glory of Wisconsin that such institutions have cost her nothing?

On behalf of the Board of Regents,

O. M. CONOVER,
LEVI B. VILAS,
LUCIUS FAIRCHILD,
D. WORTHINGTON,
JOHN G. McMYNN,
Executive Committee.

APPENDIX "A.

TREASURER'S REPORT.

MADISON, Wis., Sept. 30, 1865.

Hon. J. G. McMYNN,

President Board of Regents University of Wisconsin:

Dear Sir—I have the honor to transmit herewith my report as Treasurer of monies received and paid out, for the fiscal year ending this day, from which it appears that there is due me for moneys advanced, eighteen hundred twenty-eight and forty-seven one-hundredth dollars.

Respectfully yours,
TIMOTHY BROWN.

NOTE.—I have in my possession, as treasurer, a 7 3-10 government bond for one hundred dollars, which was donated to the University by Hon. J. T. Lewis, for a "medal fund."

T. BROWN, TREASURER OF THE UNIVERSITY OF WISCONSIN, Dr.

Date of Receipt.	From whom Received.	On what Account.	Amount.
1864			
Sept. 30	Balance as per last report, ...	....	978 81
Dec. 20	Treasurer state of Wisconsin, ...	Income fund, ...	1,300 00
... 29	Insurance, ...	....	80 00
1865			
Jan. 21	Treasurer state of Wisconsin, ...	Income fund, ...	2,000 00
April 6	................do..........................	.........do.......................	2,000 00
June 27	................do..........................	.........do.......................	4,000 00
Sept. 30	................do..........................	.........do.......................	1,000 00
	Balance due the treasurer, ...	....	1,828 47
			$13,187 28

T. BROWN, TREASURER OF THE UNIVERSITY OF WISCONSIN, Cr.

Date of Payment	Date of Warrant.	No. of War'nt	To whom payable and on what account.	Amount.
1864.				
Oct. 4	Oct. 4	1418	W. T. McConnell, wood,	$26 25
... 21	... 20	1419	W. P. Towers, painting,	303 51
... 21	... 20	....	J. W. Sterling, wood,	16 00
... 21	... 20	1420	J. W. Sterling, incidentals,	350 00
... 21	... 20	....	Faculty, Smithsonian reports, etc.,	31 50
Nov. 22	Nov. 22	1424	J. W. Sterling, wood,	83 25
... 29	... 12	1423	P. H. Van Bergen, do	128 40
Dec. 6	Dec. 6	1425	Thos. Chenoweth, do	12 90
... 9	... 9	1426	J. D. Noble, do	54 00
... 14	... 14	1427	J. D. Noble, do	105 00
... 14	... 14	1428	M. Lachman, do	16 50
... 14	... 14	1429	Adam Davidson, do	5 00
... 14	... 14	1430	Chas. Waterman, do	86 22
... 14	... 14	1431	Thos. W. Hunt, do	6 25
... 17	... 14	1432	Chas. Waterman, do	84 34
... 21	... 21	1431	John Bathgate, do	97 50
... 24	... 24	1432	Chas. Waterman, do	110 44
... 24	... 24	1433	Adam Davidson, do	69 00
... 31	... 31	1434	J. W. Sterling, salary,	225 00
... 31	... 31	1435	E. S. Carr, do	225 00
... 31	... 31	1436	J. D. Butler, do	225 00
... 31	... 31	1437	Daniel Reed, do	225 00
... 31	... 31	1438	J. P. Fuchs, do	225 00
... 31	... 31	1440	O. V. Tousley, do	250 00
... 31	... 31	1441	D. H. Tullis, do	25 00
1865.				
Jan. 8	Jan. 8	1442	Patrick Walsh, janitor,	105 00
... 8	... 8	1443	Thos. W. Hunt, wood,	32 82
... 8	... 8	1444	John Walsh, janitor,	105 00
... 5	... 8	1439	C. H. Allen, salary,	175 00
... 9	... 9	1445	John and W. Bathgate, wood,	271 40
... 10	... 11	1448	J. W. Sterling, do	88 54
... 10	... 11	1449	Faculty, bellringing, etc.,	31 50
... 10	... 11	1447	J. W. Sterling, incidentals,	300 00
... 14	... 14	1450	Chas. Waterman, wood,	124 00
... 20	... 20	1451	Jas. Harvey, do	700 00
... 27	... 25	1452	Neeley Gray, coal,	112 50
... 28	... 28	1453	Thos. Norman, wood,	156 63
Feb. 1	Feb. 1	1454	A. A. Frederick, do	41 00
... 1	... 1	1455	Chas. Waterman, do	181 15
... 6	Jan. 16	1446	Andrew Flum, do	158 00
April 7	M'ch 31	1456	J. W. Sterling, salary,	225 00
... 7	... 31	1457	Daniel Reed, do	225 00
... 7	... 31	1458	J. P. Fuchs, do	225 00
... 7	... 31	1459	E. S. Carr, do	225 00
... 7	... 31	1460	J. D. Butler, do	225 00
... 7	... 31	1461	C. H. Allen, do	125 00
... 7	... 31	1462	O. V. Tousley, do	250 00
... 7	... 31	1463	D. H. Tullis, do	25 00
... 7	... 31	1464	Patrick Walsh, janitor,	120 00
... 7	... 31	1465	John Walsh, do	105 00
... 8	... 8	1466	James McDowell, carpenter work,	118 50
May 1	June 30	1479	G. F. Hastings, agent, insurance,	75 00

T. BROWN, TREASURER OF UNIVERSITY OF WISCONSIN, Cr.—concluded.

Date of Paym't.	Date of Warrant.	No. of W'r'nt	To whom payable, and on what account..	Amount.
1865				
May 1	June 30	1478	M. D. Miller, agent, insurance,....................	$75 00
... 1	... 30	1477	..............do...............do........................	75 00
June 30	... 30	1480	T. Brown, treasurer, interest,......................	39 68
... 30	... 30	1467	Faculty, ringing bell, etc.,..........................	31 50
... 30	... 30	1468	J. W. Sterling, music and printing,............	40 00
... 30	... 30	1409	J. W. Sterling, salary,................................	225 00
... 30	... 30	1470	J. D. Butler,........do..................................	225 00
... 30	... 30	1471	Daniel Reed,........do..................................	225 00
... 30	... 30	1472	E. S. Carr,..........do..................................	225 00
... 30	... 30	1473	J. P. Fuchs,.........do..................................	225 00
... 30	... 30	1474	C. H. Allen,.........do..................................	175 00
... 30	... 30	1475	O. V. Tousley,......do..................................	250 00
... 30	... 30	1476	D. H. Tullis,.........do..................................	25 00
... 30	... 30	1481	Patrick Walsh, janitor,................................	120 00
July 3	July 1	1482	J. W. Sterling, furniture,............................	75 00
... 3	... 3	1483	J. W. Sterling, incidentals,.........................	400 00
... 5	... 3	1484	Jas. McDowell, carpenter work,...................	74 00
Sept. 9	Sept. 9	1485	W. H. Wyman, agent, insurance,.................	180 00
... 26	21	1486	J. W. Sterling, incidentals,.........................	1,200 00
... 26	... 21	1489	E. S. Carr, salary,.	250 00
... 26	... 21	1487	J. W. Sterling,.....do..	250 00
... 25	... 21	1488	Daniel Reed,........do..................................	250 00
... 26	... 21	1491	J. P. Fuchs,.........do	250 00
... 26	... 21	1492	C. H. Allen,.........do..................................	200 00
... 26	... 21	1493	D. H. Tullis,.........do.........	25 00
... 26	... 21	1494	Patrick Walsh, janitor,................................	120 00
... 26	... 21	1495	Jas. McDowell, carpenter work,...................	150 00
... 26	... 21	1490	J. D. Butler, salary,....................................	250 00
				$18,187 28

REPORT OF THE AUDITING COMMITTEE.

MADISON, WIS., Sept. 30, 1865.

We have examined the books and vouchers of T. Brown, Treasurer of the University of Wisconsin, and compared them with the books, accounts and warrants of the Secretary of the Board for the fiscal year ending this date, and find that there is a balance due the Treasurer of eighteen hundred and twenty-eight dollars and forty-seven cents.

JNO. G. McMYNN,
President of the Board of Regents.
D. H. TULLIS,
Sec'y of the Board of Regents.
Auditing Committee of the University of Wisconsin.

APPENDIX "B."

REPORT OF THE SECRETARY.

MADISON, WIS., Sept. 30, 1865.

To the Board of Regents of the University of Wisconsin:

The Secretary of the Board of Regents respectfully reports that warrants have been drawn upon the Treasurer of the Board, during the fiscal year ending on the 30th day of September, 1865, as follows, to-wit:

1864.		To Whom Issued.	What for.	Amount.
Oct.	4	W. F. McConnell,	Wood,	$26 25
...	20	W. P. Towers,	Painting,	808 51
...	20	J. W. Sterling, Vice Chancellor,	Incidental Expenses,	850 00
...	20	.........do.................do	Wood,	16 00
...	20	Faculty,	Bell ringing, Librarian, &c.,	81 50
Nov.	12	P. H. VanBergan,	Wood,	128 40
...	21	J. W. Sterling,	...do	88 25
Dec.	6	Thos. Chynoweth,	...do	12 90
...	9	J. D. Noble,	...do	54 00
...	14	........do	...do	105 00
...	14	Math. Lachnir,	...do	16 50
...	14	Adam Davidson,	...do	5 00
...	14	Chas. Waterman,	...do	86 22
...	14	Thos. W. Hunt,	...do	6 25
...	17	Chas. Waterman,	...do	84 84
...	21	John Bathgate,	...do	97 50
...	25	Chas. Waterman,	...do	110 44
...	25	Adam Davidson,	...do	69 00
...	81	Prof. J. W. Sterling,	Salary,	225 00
...	81	Prof. E. S. Carr,	......do	225 00
...	81	Prof. Jas. D. Butler,	......do	225 00
...	81	Prof. Daniel Read,	......d0	225 00
...	81	Prof. J. P. Fuchs,	......do	225 00
...	81	Prof. Chas. H. Allen,	......do	175 00
...	81	O. V. Tousley, Tutor,	..... do	250 00
...	81	D. H. Tullis, Sec.,	......do	25 00
...	81	Patrick Walsh, Janitor,	Services,	105 00
...	81	John Walsh,........do	......do	105 00
...	81	Thos W. Hunt,	Wood,	82 87

SECRETARY'S REPORT—continued.

1864.		To whom issued.	What for.	Amount.
1865.				
Jan.	9	J. & W. Bathgate,	......do	$271 40
...	10	Andrew Flum,	......do	158 00
...	10	J. W. Sterling,	Incidental expenses,	800 00
...	10	......do	Wood,	88 54
...	10	Faculty,	Bell ringing, librarian, etc.,	81 50
...	14	Chas. Waterman,	Wood,	124 00
...	20	Jas. W. Harvey,	......do	700 00
...	25	Neely Gray,	Coal,	112 50
...	28	Thos. Norman,	Wood,	156 68
Feb.	1	A. D. Frederick,	......do	41 00
...	1	Chas. Waterman,	......do	181 15
Mar.	81	Prof. J. W. Sterling,	Salary,	225 00
...	81	Prof. Daniel Read,	......do	225 00
...	81	Prof. J. P. Fuchs,	......do	225 00
...	81	Prof. E. S. Carr,	......do	225 00
...	81	Prof. J. D. Butler,	......do	225 00
...	81	Prof. Chas. H. Allen,	......do	125 00
...	81	O. V. Tousley, Tutor,	......do	250 00
...	81	D. H. Tullis, Sec.,	......do	25 00
...	81	Patrick Walsh, Janitor,	......do	120 00
...	31	John Walsh, ...do	......do	105 00
April	8	Jas. McDowell,	Carpenter work,	118 50
June	19	Faculty,	Bell ringing, librarian, etc.,	81 50
	19	J. W. Sterling, Vice Chancellor,	Music & printing for com.,	40 00
...	30	..........do..........do	Salary,	225 00
...	30	Prof. J. D. Butler,	......do	225 00
...	80	Prof. Daniel Read,	......do	225 00
...	80	Prof. E. S. Carr,	......do	225 00
...	30	Prof. J. P. Fuchs,	......do	225 00
...	30	Prof. Chas. H. Allen,	......do	175 00
...	80	O. V. Tousley, Tutor,	......do	250 00
...	20	D. H. Tullis, Sec.,	......do	25 00
...	30	M. D. Miller, Agent,	Insurance,	75 00
...	80	.........do.........do	......do	75 00
...	80	G. F. Hastings,...do	......do	75 00
...	80	T. Brown, Treasurer,	Interest on sums advanced,	89 68
...	80	Patrick Walsh, Janitor,	Services,	120 00
July	1	J. W. Sterling, Vice Chancellor,	Furniture forCast. So. room,	75 00
...	1	.........do.........do	Incidental expenses,	400 00
...	1	James McDowell,	Carpenter work,	74 00
Sept.	9	W. H. Wyman, Agent,	Insurance,	180 00
...	21	J. W. Sterling, Vice Chancellor,	Stoves and iucidental ex.,	1,200 00
...	80	..............do	Salary,	250 00
...	80	Prof. Daniel Reed,	......do	250 00
...	80	Prof. E. S. Carr,	......do	250 00
...	80	Prof. J. D. Butler,	......do	250 00
...	80	Prof. J. P. Fuchs,	......do	250 00
...	80	Prof. Chas. H. Allen,	......do	200 00
...	80	D. H. Tullis, sec.,	......do	25 00
...	80	Patrick Walsh, janitor,	......do	120 00
...	80	Jas. McDowell,	Carpenter work,	150 00
				$18,187 28

The foregoing list of warrants issued during the last fiscal year may be appropriately classified as follows :

Salaries of professors,	$6,050 00
Salary of secretary,	100 00
Janitor services,	675 00
Incidental expenses, stoves and repairs,	3,080 51
Fuel,	2,762 09
Insurance,	405 00
Interest,	39 68
Furniture,	75 00
	$13.187 28

Madison, Sept. 30, 1865.

D. H. TULLIS, *Secretary.*

APPENDIX "C."

REPORT OF THE FACULTY.

To the Board of Regents of the University of Wisconsin:

The faculty of the University, through me as its organ, deem it proper to present to your body assembled at the close of our present academic year, the following communication in regard to the condition and prospects of the University, and the policy and methods in their judgment most likely to secure its permanent success and prosperity. For the sake of convenience, the various subjects in this communication will be arranged under appropriate heads.

HISTORY OF STATE UNIVERSITIES.

The University of Wisconsin belongs to that class of educational institutions ordinarily denominated State Universities. These institutions are so designated from the fact, that the general government, as an established policy in the disposition of the public domain, sets aside within each territory two townships, or seventy-two sections of land, "for the permanent endowment of a seminary of learning," and, by the organic act admitting a new state into the Union, vests the land thus reserved, in the State for this exclusive use. Every State admitted since Ohio, and including that State, has had such grant of land for this specific object. Ohio did in fact receive a double grant, in consequence of reservations having been made in the contract of the United States with the Ohio Company, and also in that with John Cleves Symmes. Hence, the two State Universities of Ohio,—the Ohio University at Athens, which went into operation as a College in the year 1809, being the earliest institution of this grade established northwest of the Ohio River, and the Miami University at Oxford, which now graduates a larger annual number in the regular College classes than any other Western College.

The United States government, by these land grants, recognizes the value, if not indeed the necessity, of the higher institutions of education, as a means of sustaining popular government; and in the very inception of every new state organization bestows the means for their establishment and support. By this bounty of the general government, even Oregon has already commenced the work of establishing its State University and putting it into actual operation. The University, no less than the common school, forms part and parcel of every new American State. The State, in accepting the terms proposed by Congress for admission into the Union, accepts this trust, and by compact becomes bound for its faithful administration. Most of the States in point of fact, and Wisconsin especially, have acknowledged by a direct constitutional provision, the obligation to establish and maintain a State University. While the State in its official capacity is the trustee, the people of the State are the *cestui que trust*, or beneficiaries of the trust endowment. Indeed, the people of all the States have a common interest in these institutions which are founded from a common fund, and which in their benefits are open alike to the people of all the States.

It is not out of place to remark, that the words invariably used to express the intent of the reservation in the original act of Congress making the reservation of land within the territories, which land is afterwards granted to the State, are the following: "For the permanent support of a Seminary of learning." The term "Seminary of learning" is synonymized or interpreted by this State and other States, in the act appropriating the grant, by the word "University," which in the United States has come to mean an institution of learning of the highest grade, to which there may or may not be attached special or professional schools, and in which the usual academic degrees are conferred. Congress has sanctioned and adopted the word "University," by using it in subsequent acts of legislation, and indeed, in the case of Wisconsin, it is the word made use of in the grant to the State, instead of the term "Seminary of learning," used in the act of reservation. This latter term has in Ohio received a judicial interpretation by the Supreme Court of the State, in what is known as the McIntire Seminary case, in which the court decided that the term "Seminary of learning" must be taken and understood in the usual and popular sense, as meaning a school of general learning of a high grade. According to this construction, the State cannot make the University a special school, whether Normal, Military, Law or Medical;

but it is not doubted that any of these may as departments be engrafted on a school of general learning, and the sphere of instruction thus be enlarged. This would seem to be the design in the adoption of the word University. Louisiana is the only State which retained the original words of dotation, "Seminary of learning," in the establishment of its State institution upon the Congressional grant. This is the institution of which the now distinguished General Sherman was President at the secession of that State.

POLICY OF THE DIFFERENT STATES IN REGARD TO THEIR UNIVERSITIES.

The policy of the States has differed very widely in regard to their State Universities. While one State has been to its University, endowed and founded in the manner here detailed, truly an *alma mater*, a cherishing mother, another has been the *injusta noverca*, pursuing strangely enough a step-mother policy, doing nothing for it except finding fault with its administration, and then perhaps wondering at its want of success; seeming indeed to grudge the fund which it never gave, and, in fact, not a few of the people actually believing that the endowment of the University is from taxation upon themselves. Ohio, Indiana, Michigan and Iowa have in various ways rendered large pecuniary aid to their respective Universities, while other States, not excepting Wisconsin, have charged the University for the administration of its fund, and possibly at a higher rate than individuals would do for like services. It is proper, however, to remark, that within a recent period, our University has been recognized by the executive and other departments of the government in their public communications, in terms of respect and encouragement, and in one or two instances, with strong and positive recommendation of aid by the state. It is certain that without State aid to supplement the fund derived from the Congressional grant, few if any of our State Universities will be adequately endowed, and without it this class of institutions must, in the progress of time, in this respect, fall behind privately endowed institutions. Were this fund, according to the true intent of the grant, sacredly guarded from all diminution or encroachment for buildings or purposes other than those of instruction, it might be otherwise.

DIFFICULTIES AND MISTAKES OF STATE UNIVERSITIES IN THEIR EARLY HISTORY.

Whatever may have been the diversity of policy adopted by the different States enjoying this bounty of the general government, the State Universities have in their commencement and early progress encountered similar difficulties, and have also fallen into similar errors of policy. So uniform indeed have these been, that the careful observer may now with much certainty predict what will be these difficulties and mistakes in Nevada or Montana, when Universities come to be founded in these States. There is first the attempt to lessen the endowment fund by the disposition of the lands at rates below their value, or by the loan of the University fund upon inadequate securities. If the vigilance of the friends of the University prevents detriment from these designs, which are commonly concealed under the pretext of benefit to a meritorious class of citizens, there is just at hand a more formidable difficulty arising from the persistent demand upon the Legislature for the division of the University fund among the several colleges of the State which are sure to spring up in a new society, from various causes, and some possibly in the hope of obtaining a portion of this fund, which is, in the popular belief, greatly magnified in amount. The reports which are made by Judiciary Committees, to whom these applications are referred by the good sense of the Legislature, that the division applied for cannot be made consistently with the terms of the grant, avail little to quiet the efforts in this direction of agents and interested parties. Prejudices are aroused agains the State University, and its condition is misrepresented. Members are elected to the Legislature upon the pledge of securing a division or diversion, which not only the terms of the grant, but perhaps the very constitution of the State, prohibit. Meanwhile, the University has no partisan or denominational supporters, and is too new to have graduates or former students in sufficient numbers to constitute a corps of defence.

The University, too, in its administration, commits blunders which embarrass its progress. One of those, invariably made, and always clearly discerned by a sagacity which comes too late for practical use, is the investment of too large a portion of its fund in dead walls, which require another portion of it to take care of them. This is a mistake of individuals in their own affairs, apt to occur at a certain age of society, and at periods of apparent prosperity, and perhaps corporations can hardly be expected to be wiser than the individuals composing them. The erection of four professors' houses, by the University of Michigan, some years since, at an expense of some $40,000, produced the most serious mischief to the University, by raising a popular clamor against the institution, as well as embarrassing the income. The Ohio University, by the simultaneous erection of two dormitory buildings, would, but for the intervention of State aid, have been obliged to suspend its operations. Minnesota so far mistook the building for the University as to exhaust nearly the entire fund upon the erection of a University edifice. leaving almost nothing for the support of professors, and for other requisites for an institution of learning. These, however, are but instances of mistaken policy, belonging to the history of every State University, unless Iowa be the exception, where the State presented to the University the buildings, or Missouri, where the county of Boone raised over $100,000 for the buildings, in order to secure the location of the State University. Impatience for more immediate results, leading to change and revolution in the internal concerns, or to enterprises designed merely to catch public attention, is another evil which is apt to effect the State University in its early history, and to work injury to healthy progress. Thus, in the Ohio University, a professor was appointed whose special business it was "to drum up" for students, and in the University of Wisconsin one who, at a large expense, ventilated its buildings, already by their site pretty well provided for in that regard. The number of the students was in the one case effected just about as much as the atmosphere in the other. These experiments are named among the most innocent and least costly, though not perhaps the most amusing, specimens of their kind.

It is well for those engaged in the administration of State Universities to understand the peculiar difficulties and mistakes which attend these institutions, though it is to be hoped that in the progress of events, our University has in a great measure passed the stage of its early embarrassment from these sources.

WHAT HAS BEEN ACCOMPLISHED.

In reviewing the past history of an institution, it is not difficult to point out mistakes of policy. These, whatever they may have been as to the University of Wisconsin, it is now worth while to consider only with the view of avoiding similar ones in the future. Whether the institution was put into operation at too early a period in the history of the State; whether the State Capital was the most judicious location; whether too much of the fund has been expended on buildings, we need not stop to inquire. Had there been no organization requiring funds, or special interest to watch over them, it is quite certain that the University fund would scarcely now have an existence. The grant by Congress of seventy-two additional sections, in lieu of saline lands, would certainly not have been applied for or made; nor would the site of the University have been secured, which, having now a large pecuniary value, not only cost the University nothing, but actually in the purchase and by the re-sale of portions of it, replenished its treasury some $12,000. Ours is the only State University which has been located at the State Capital. Some difficulties from this fact in regard to expensiveness of living, and the want of accommodation in private families at reasonable rates, have embarrassed the institution from the beginning, and made it necessary to erect dormitory buildings. The University, also, cannot, at the State Capital, form the sole or principal object of interest as at a site in a village which exists mainly in reference to the accommodation of the University. But, on the other hand, there are some compensations, and among these are the advantages of the State and Historical Society libraries, which are freely open to our students. The librarian of the Historical library states that this library is more used by the students of the University than by all other classes of citizens of the State. The State library is also freely resorted to by our students, to whom every facility for its use is afforded by Professor Conover, its librarian; and were there a law school in connection with the University, the large and excellent law library of the State would constitute a library of reference for the school.

Let us review what actually has been accomplished within the few years since the first steps were taken toward the organization of the University. A site has been secured unsurpassed for beauty; buildings have been erected which, to whatever criticisms liable, are nevertheless superior to those of any other State University in any State; library, apparatus, cabinet of minerals, botanical collections, and other appointments of a University, and some of these superior to those but a few years since existing in our oldest institutions of learning, have been gathered. A Faculty of instruction has been brought together, which, in their respective departments, claims to compare at least respectably with that of other institutions. The organization of a good working faculty, it may be remarked, is everywhere considered a capital difficulty in the commencement of a new college. It is true, the Faculty is small in number, but has, by diligence, been able to afford the full cycle of collegiate instruction. A body of students has been brought together, numbering in all departpartments for the present year, exclusive of ladies in the normal department, 235, and including them 306. The total number for the last year was 361. The habit of resorting to the State University has, to some extent, been created. Thus far the foundations of a University, which are designed to be coeval with the State, have been laid,

The period of difficulty for a University is when a State is new, when material wants are pressing, when few young men engage in a course of study extending through a period for its full completion of six or eight years, and even these few are inclined, from the associations of their parents and friends, to seek the institutions of the States from which they emigrated. Another difficulty exists in the very development and progress of the country. Cities spring rapidly into existence, and almost into maturity—railroads are built—all material advancement is rapid. Even city schools and commercial colleges, and all the appliances for quick and empirical preparation for practical life, flourish. Why not then, the University in its regular and extended course of instruction? It must be remembered, that it is not until a stage of society considerably advanced in wealth and the means of leisure, that young men in any great number enter upon courses of study requiring long abstraction from the pursuits of business. Though this may be the case, and other difficulties incident to a new condition spring up, yet the University must be founded with the beginnings of the commonwealth, and struggle forward to its proper place. This is the history of American social progress. The foundations which have here been laid, it is hoped, will grow up with the State and last for all time.

Still we are to remember that the financial resources of the University are not such that it can command success by its numerous corps of Professors, by its various departments of instruction, its museum of arts, its astronomical observatory, and other literary, scientific and æsthetic advantages which might attract the attention of the world. Had the Regents of the University of Wisconsin at their disposal to-day, an annual income of $42,000, in addition to a considerable amount arising from matriculation and other fees, and were they likewise relieved from the heavy charge of keeping up dormitory rooms for students, a condition of things which represents the actual state of the University of Michigan, they might, by an array of unequalled advantages, call in students from every portion of our country. In such a state of facts, the Board and Faculty would feel relieved of much of the embarrassment which now meets them. Still we must remember that there are as many of the State Universities having a foundation income less than that of our own, as of those having one more ample. The Miami and Ohio Universities have incomes each of but about $6,000, and the Indiana University of about $8,000, these institutions supplementing their income by a rate of charge for tuition much beyond our own. Our own income when lessened by State charges is but little, if any, over $10,000, and we are also subjected to much heavier expenses for fuel, and keeping up dormitories, than the institutions here referred to. At all events, the State has the University fund, as a trust, such in amount as it is, and it is the sacred obligation of the Regents and the Faculty as the immediate agents of the State, to make the most of it for the purposes to which it is consecrated. Nor can it be doubted, that by a judicious policy we may make our institution useful in our own day, and establish foundations which may be enlarged and built upon by those to come after us. We are to bear in mind that the University is for all time, and it is not to be questioned, that the State will sooner or later furnish the means of adequate support.

THE METHODS OF PERMANENT SUCCESS.

The only true method of success is to deserve it—to make the University as an institution of learning, what it ought to be—to impart sound and thorough scholarship—to give the mental and moral discipline which will make men of sound thought and sober action. This requires the discipline of years, nor is it possible to hasten it. The University cannot do *quick* work. Any pretence of that kind is *charlatanism*, and unworthy the character of an institution of learning of a high grade. The Faculty must be devoted to their work as a cause, and must be a unit in their purpose of building up the University. They must be animated by the spirit of that great mind-builder Arnold, and feel an interest in each individual pupil. There must be the same unvarying punctuality—the same earnest and pains-taking labor required in all other institutions of education—especially is this necessary in a Faculty, small in the number of its members.

The Faculty of the University fully recognize this as the measure of their duty, and, whatever may have been their own shortcomings, as their ideal of obligation resting upon them as Professors.

In a new institution, with limited resources, the gathering up of the requisite means of improved instruction, as library, apparatus, cabinet of minerals, gallery of fine arts, &c., must be the result of gradual accumulation, and each year something ought to be done in this direction. While there should be proper advertisement through the public official documents and by the usual methods, the students themselves constitute the best advertisement. Indeed, present or former students constitute very largely our support, and the most reliable medium of acting upon the public mind. The Faculty also, who, like other human beings, are liable to discouragement, must have the supporting influence of the Board of Regents. From their very position they cannot have that of a sect or party, as they would have in a local or denominational institution.

It is not improper to say that frequent change in the policy of the University—the pulling up of the bean in the morning to see how much it has grown during the night—or frequent change in the members composing the faculty of instruction, creates an impression of instability, and is contrary to the character of an institution whose life is to run parallel with that of the State itself. When experienced Professors leave a College to better their own condition, the evil is a very serious one to its prosperity. Hence Professors ought, as far as may be, to be selected who are willing to devote themselves to their college work as the business of their life. This is the more important inasmuch as the number of College Professorships in the country is small, and there is correspondingly but a small class of men prepared by education, habit and otherwise to fill these Professorships.

It need not be stated how much of the excellence and stability of our most celebrated American institutions of the highest learning has resulted from the long continuance of their most eminent Professors in their respective chairs of instruction. Day, Kingsley, Silliman, Nott, McLean each served his institution for more than half a century. Hopkins has served Williams thiry-five years, and Mahan, Bartlett and Church have been the leading Professors in the United States Military Academy at West Point for quite as long a period. Grant, Sherman, Meade, Sheridan, Thomas, Ord, in fact nearly all our highest military officers look back to the same Professors as their instructors in their principal studies. The Faculty by no means wish to be understood as asking that any incompetency, negligence, or immorality should be overlooked in themselves, but to express the conviction, that changes without cause, to experiment with new men, seldom produce the expected result; and especially, that to avoid occasion of change, great care should be exercised in the selection of new University officers, whenever such are to be brought into the Faculty.

DIFFICULTIES AND EMBARRASSMENTS OF THE WAR PERIOD.

In considering the condition and prospects of the University, the Faculty deem it proper to revert to the special difficulties which have embarrassed them both as individuals and as University officers during the war period. Every call, from the very first, which has been made by the Government for men, has taken from us a portion of our best students, and especially reduced our advanced classes. The hundred-day call broke up our commencement of last year, as it did that of the other Colleges of the State. The very last enlistment took from us a member of the senior class now graduating, and also one of the junior class together with others not so advanced in their course. The present graduating class has indeed, wholly or mainly by the war, been reduced from more than twenty to the existing number. Besides the direct calls to the field, the pressure for young men for various business avocations has taken or kept from us many others. It may not be improper to remark also that the members of the Faculty have experienced much personal embarrassment from inadequate support arising from the increased rates of living, and especially at Madison, as a seat of Government and a military post. By pinching economy, they could not live upon their salaries, even with small families; and with those having large families or subjected to any unusual expenses, the University salary has afforded but little, if any, over half support. Up to this time, the improvement in this respect has been but slightly perceptible. Notwithstanding these difficulties, it was the determination of the Faculty, both as a matter of duty and professional pride, to labor to the utmost to maintain the continuity of the institution, and they have succeeded in sustaining numbers and keeping up classes beyond all reasonable expectations. The faculty had full confidence that the close of the war would greatly fill up our higher institutions of learning, and our own among the number; that not only would many of our former students return to us, but that others from the army having had their hopes and views enlarged, and having some means at their command, would, before resuming their places in society, spend a time in the University. The indications from letters of inquiry and other information are, that this expectation will be fully realized. Notwithstanding the personal embarrassment and trouble above referred to on the score of insufficient support, the Board will bear witness that they have not been annoyed in this regard with complaints or demands for change. The Faculty have felt that they could confide in the just and liberal treatment of the Board according to the means of the institution.

NORMAL DEPARTMENT.

The Faculty are of the opinion that the Normal Department has made the University a more useful institution during the past three years, than otherwise it could have been. It is not, however, to be disguised that among former students of the University, and among leading ones now in the institution, there has been a strong feeling of opposition to the Department, mainly on the ground of its bringing females into the University. There has been an apprehension that the standard of culture would be lowered in consequence. No reason whatever has as yet existed for this apprehension. There has been no such mingling of classes in the higher and more recondite subjects as to render this effect possible, even if it would be the result; and, in point of fact, there has not been a period in the history of the University when some few students have carried their studies to a higher or wider range than in recent classes. The resignation of Prof. Allen, who has conducted this Department since its existence with signal energy and success, raises new questions for the decision of the Board, as to whether there shall be elected a Professor to fill the place of Prof. Allen, or whether there shall be the union of the Normal and Preparatory Departments by the election of a Principal to have charge of both Departments, or whether the department shall be dropped altogether.

A CHANCELLOR.

The duties appertaining to the office of a Chancellor of the University have, since the resignation of Dr. Lathrop in 1858, devolved upon different Professors, Dr. Barnard not having at any time engaged in the ordinary duties of instruction or internal administration. The chairmanship of the Faculty, matriculation of the students, and various business items, were, by vote of the Board of Regents, devolved upon Prof. Sterling, in date the oldest Professor of the University, under the not very apt designation of Dean of the Faculty. Inasmuch as the presiding officer of the University is denominated Chancellor, the more appropriate designation would seem to be Vice Chancellor. The department of instruction belonging to the Chancellor was, by vote of the Faculty, assigned to Prof. Read, who had for several years in the Ohio University, been the Professor in this department. With his own department, this was evidently too wide a range of subjects for any one chair, and was intended as merely a temporary arrangement, to exist during the vacancy in the Chancellorship. The duties of Chaplain, which are very usually attached to the presiding officer, have been performed with great acceptance by Prof. Butler.

Two considerations have hitherto restrained the Faculty from urging the appointment of a Chancellor: *first*, the condition of the finances of the University, and *second*, the difficulty of finding the right man for the place. It often happens, in University history, that the President adds nothing to the institution in its efficiency above the ordinary Professors, except the burden of greater salary. It is not, however doubted that the election of an earnest practical man, adequate to the office and not too great for it, would benefit the University, by providing an officer to oversee its general interests, and also by relieving Professors from care which does not properly belong to them. The importance of making the right selection, whenever this step is taken, is doubtless as strongly felt by the Board as by the Faculty.

A LAW SCHOOL.

It would be an easy matter to suggest improvements in various directions indicative of progress, were the income sufficient to justify these new undertakings. In our actual financial condition, with the uncertainties resting upon the monetary affairs of the country, the Faculty fully appreciate the necessity of caution in entering upon plans requiring additional expenditure. There are, however some reasons in favor of the establishment, at the earliest practicable period, of a Law Department of the University, which it is worth while to consider. Madison affords special advantages for such a Department: 1st, as the seat of the State Government, where the highest Courts are held and the most eminent lawyers assemble, and where also there is one of the best law libraries of the country accessible for reference: 2d, there are here at all times a number of law students in private offices—at the present time not less than half a dozen of our own former students, besides others, who would at once form the nucleus of such a school.

The expense of such a Department to the University may be comparatively a small item. At first a single Professor and a law session of four and a half months would be required. A fixed salary with the fees of the department would be the best mode of compensation; the main difficulty would be in securing a suitable man for the place.

The advantage of such a Department in our University would be not only its usefulness as a means of professional culture, but it would also tend to conciliate the support of a profession always powerful in every free State.

As an example of the value of steady perseverance, not only in regard to this department but every other of educational labor, a fact mentioned by the late Judge Story in one of his published letters, is worthy of thought. He states that from 1817 to 1829, the average annual number of law students in the Harvard Law School at Cambridge, was *eight*. He lived to see the day when Cambridge was conceded to be the first school of Common Law in the world, and having near 200 students; and not only this, when between twenty and thirty other Law Schools, in imitation of Cambridge, had sprung up in different parts of the United States, some of them almost rivaling Cambridge in the number of their students.

CATALOGUE.

For the more detailed information of the internal condition of the University, its courses of study, &c., the printed catalogue for the year now closing, is herewith submitted. It ought, perhaps, to be remarked, that the number of students in the regular classes will in no manner measure the usefulness of an institution in a forming condition of society. Many who are preparing for professional study even, do not take the prescribed course for either degree awarded in this University. Yet it is important that these regular collegiate classes, whether more or less numerous, should be kept up as furnishing a standard which all will be more likely to attain than without them. The standard of requirement, too, for graduation, is a very high one, embracing in the scientific course two modern languages, the German and French; and, in addition to a very ample course in the Latin and Greek, both these languages, as well as an extended scientific and philosophic course, for the baccalaureate in the arts.

CONCLUSION.

In conclusion the Faculty desire to state to the Board that it will afford them pleasure, as a body or as individuals, to appear before the rd or a committee, to give any information they may possess, or to present the results of their experience or their views more specifically in regard to any matters relating to the University.

Very Respectfully, &c.,

J. W. STERLING,
Dean of Faculty.

June 27th, 1865.

APPENDIX D.

ANNUAL CATALOGUE
OF THE
OFFICERS AND STUDENTS
OF THE
UNIVERSITY OF WISCONSIN,
FOR THE ACADEMIC YEAR CLOSING JUNE 28, 1866.

BOARD OF REGENTS.

LUCIUS FAIRCHILD,	Secretary of State, (*ex officio*),		Madison.
JOHN G. McMYNN,	Supt. Public Instruction, (*ex officio*),		Racine.
M. FRANK,	Term expires,	1867,	Kenosha.
O. M. CONOVER,	do	do	Madison.
THEODORE PRENTISS,	do	do	Watertown.
EDWARD SALOMON,	do	do	Milwaukee.
LEVI B. VILAS,	do	1869,	Madison.
D. WORTHINGTON,	do	do	Madison.
GEO. B. EASTMAN,	do	do	Fond du Lac.
HENRY D. BARRON,	do	do	St. Croix Falls.
D. H. MULLER,	do	1871,	Milwaukee.
M. M. DAVIS,	do	do	Appleton.
H. P. STRONG,	do	do	Beloit.
CHARLES THAYER,	do	do	Prescott.
D. H. TULLIS,	Secretary,		Madison.
TIMOTHY BROWN,	Treasurer,		Madison.

FACULTY.

JOHN W. STERLING, A. M.,

Dean of the Faculty, and Professor of Mathematics and Natural Philosophy.

DANIEL READ, LL. D.,

Professor of Mental, Ethical and Political Science, Rhetoric, and English Literature.

EZRA S. CARR, M. D.,

Professor of Chemistry and Natural History.

JAMES DAVIE BUTLER, LL. D.,

Professor of Ancient Languages and Literature.

JOHN P. FUCHS.

Professor of Modern Languages and Literature.

ORSON V. TOUSLEY, A. M.,

Principal of Preparatory School.

CHARLES H. ALLEN,

Professor of Normal Instruction.

MISS M. S. MERRILLE,

Preceptress in Normal Department.

MISS CLARISSA L. WARE,

Assistant Teacher in Normal Departmen

GRADUATES OF THE UNIVERSITY.

JULY, 1854.

Levi Booth, A. M.,	Pike's Peak.
Charles T. Wakeley, A. M.,	Madison.

JULY, 1856.

Samuel S. Benedict, A. M.,	Madison.
James M. Flower, A. M.,	Madison.
Sidney Foote, A. M.,	Madison.
Burgess C. Slaughter, A. M.,	Middleton.

JULY, 1857.

Sinclair W. Botkin, A. M.,	Madison.
Thomas D. Coryell, A. M.,	Madison.
Charles Fairchild, A. M.,	Madison.
William C. Jencks, A. M.,	Terre Haute, Ind.
John F. Smith, A M.,	Constantinople.

JULY, 1858.

Richard W. Hubbell, A. M.,	Milwaukee.
John W. Slaughter, A. B.,	Virginia.
William F. Vilas, A. M.,	Madison.

JULY, 1859.

Alexander C. Botkin, A. M.,	Madison.
Hill C. Bradford, P. B.,	Virginia.
Leonard S. Clark, A. M.,	California.
Samuel Fallows, A. M ,	Appleton.
Edward B. Guild, A. M.,	Kansas.
Elbert O. Hand, A. M.,	Racine.
Edwin Marsh, A. M.,	Beaver Dam.
Philip C. Slaughter, P. .	Virginia.

JUNE, 1860.

George W. Bird, A. M.,	Jefferson.
Thomas J. Hale, A. M.,	Milwaukee.
William P. Powers, A. M.,	Madison.
*John E. Sutton, A. M.,	Madison.
Leander M. Comins, A. M.,	Maine.
John B. Parkinson, A. M.,	Fayette.
Milan W. Serl, P. B.,	Fairfield.
Fred. T. Starkweather, A. M.,	Milwaukee.

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* Deceased.

JUNE 1861.

Farlin Q. Ball, P. B.,	Monroe.
Henry Vilas, A. B.,	Madison.
John D. Parkinson, A. B.,	Madison.
James B. Britton, A. B.,	Chillicothe, O.
William E. Spencer, A. B.,	Washington City.
Wiilliam W. Church, A. B.,	Madison.
Almerin Gillett, P. B.,	Geneva.
S. Azariah Hall, A. B.,	Eau Claire.
Michael Leahy, P. B.,	Portland.

JUNE, 1862.

Michael Leahy, A. B.,	Portland.
Isaac N. Stewart, P. B.,	Waukesha.

JUNE, 1863.

Pitt Cravath, P. B.,	Whitewater.
Milton S. Griswold, A. B.,	Waukesha.
Levi B. Vilas, A. B.,	Madison.
Frank Waterman, P. B.,	Madison.

JUNE, 1864.

Eugene M. Congar, P. B.,	Whitewater.
James Lambert High, A. B.,	Black Earth.
Augustus H. Salisbury, P. B.,	Oregon.
John Coit Spooner, P. B.,	Madison.
Washington Irving Wallace, A. B.,	Baraboo.

GRADUATING CLASS OF JUNE, 1862.

James Byrne,	Madison.
John Meader Jones,	New York.
Philip Stein,	Waukesha.

COLLEGE STUDENTS.

NOTE.—C. Classical.

SENIOR CLASS.

Charles P. Blachly,	Lodi.
James Byrne, *c*	Madison.
John Meader Jones,	Boston, N. Y.
George H. Pradt, *c*	Madison.
*Asher Starkweather, *c*	Columbus.
Philip Stein, *c*	Waukesha.
Henry Harrison Vilas, *c*	Madison.

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*Deceased.

JUNIOR CLASS.

James A. Blake, *c*	Elliota, Minn.
Arthur Peck, *c*	Monroe.
Frederick Scheiber,	West Bend.
John Adam Spencer,	Evansville.
Wm. Henry Spencer,	Evansville.

SOPHOMORE CLASS.

John D. Bicknell,	Lake Mills.
Charles T. Dickson, *c*	Madison.
Lewis E. Reed,	Green Lake,
Abner L. Thomas,	Annolon.
William A. Truesdell,	Wautoma.

FRESHMAN CLASS.

James D. Butler, *c*	Madison.
Thomas Bradford Chynoweth, *c*	Madison.
Herbert W. Chynoweth, *c*	Madison.
Thornton Phillebrown,	Monroe.
John A. Gaynor,	Sussex.
George W. Holland,	Mazeppa, Minn.
Walter Sterling Holliday, *c*	Milwaukee.
George G. Hough, c.	Memphis. Tenn.
Charles D. Jones,	Mineral Point.
James Monroe Kerr, *c*	Footville.
John L. Kester,	Rock Grove, Ill.
Isaac S. Leavitt,	Burns,
Daniel E. Maloney,	Madison.
Samuel Maxwell, *c*	Madison.
William A. Mears, jr.,	Madison.
Augustus M. Rice,	Mantorville, Minn.
Frederick S. Stein, *c*	West Salem.
James B. Tabor,	Markesan.
James Turner,	Sussex.
Wilson H. Van Dusen, *c*	Mineral Point.
Henry C. Vilas, *c*.	Ogdensburg, N. Y.
Charles E. Vroman,	Madison.
William Nelson Young,	Memphis, Tenn.
Joseph W. Young, *c*	Memphis.

PREPARATORY CLASS.

Charles David Atwood,	Madison.
Henry F. Atwood,	Madison.
Robert McKee Bashford,	Fayette.
Edwin S. Bean,	Madison.
Thomas Bohan,	Hartford.
Horace A. Booth,	Madison.
Edwin J. Caro,	Marshall.
Edward Carr,	Madison.
Everard Lang Cassels,	Lone Rock.
Arthur Henry Chetlain,	Galena,
George W. Christie,	Berlin.
Sidney H. Cole,	Madison.
Montrose Cook,	do
Elmer H. Craig,	do

William C. Damon,	Burke.
Joseph DeForest,	Windsor.
Robert Dow,	Cambridge.
Theron J. Dryden,	Blue Mounds.
Gottlieb Engel,	Madison,
Frank Fargo,	Lake Mills.
George W. Field,	Sun Prairie.
William T Goodhue,	Stevens Point.
Frank H. Gray,	Madison.
Stephen S. Gregory,	do
Charles N. Gregory,	do
George J. Hauck,	Belleville, Ill.
Fred Hill,	Mantorville.
John Hilton,	Columbus.
Edward C. Kellogg,	Madison,
Fernando J. Knight,	Markesan.
George Washington Lee, Jr.,	Shullsburg.
Wm. H. Libby,	Madison.
Thos. M. Maxwell,	Madison.
Jasper A. McKormack,	Waverly, Iowa.
Claud Richard Norton,	Madison.
Franklin E. Parkinson,	Mineral Point.
Frank K. Proudfit,	Madison.
Philip L. Spooner,	Madison.
Chas. H. Rogers,	Madison.
Manly W. Tabor,	Markesan.
Orrin Dodge Teall,	Ogdensburg.
Frederick Van Norstrand,	Madison.
Harvey M. Wadleigh,	Stevens Point.
John J. Weller,	Memphis, Tenn.

NORMAL STUDENTS.

SENIOR CLASS.

Mary A. Allen,	Geneva.
Clara J. Chamberlain,	Milwaukee.
Annie E. Chamberlain,	Milwaukee.
Hattie M. Rusk,	Viroqua.
Lydia Sharp,	Madison.
Annie E. Taylor,	Middleton.

MIDDLE CLASS.

H. Frank Allen,	Geneva.
Louie R. Fennett,	Sun Prairie.
Ellen Byrne,	Madison.
Olive De Haven,	Shuey's Mills.
Abba Gilbert,	Kenosha.
Flora E. Griffin,	Madison.
L. W. Huntington,	Madison.
Ellen Kelly,	Monroe.
Josephine V. Lamb,	La Crosse.

Jennie A. Livingstone,	Johnson's Creek.
Helen V. Noble,	Madison.
Anna J. Pickard,	Sun Prairie.
Bertha Pradt,	Madison.
Mary B. Reed,	Madison.
Agnes J. Sawyer,	Tunnel City.
Susie C. Smith,	Middleton.
Maria L. Storey,	Albany.
Millie J. Stevens,	Stoner's Prairie.

JUNIOR CLASS.

Mary E. Bowley,	Mt. Horeb.
Mellie Bradley,	Madison.
Emeline M. Burch,	Verona.
Sarah S. Church,	Madison.
Nellie Chynoweth,	Madison.
Hattie A. Coffin,	Sun Prairie.
Nellie E. Craig,	Madison.
Mary L. Craig,	Madison.
Jennie E. Davison,	Sun Prairie.
Isabel Durrie,	Madison.
Emogene G. Easting,	Ashton.
Addie M. Easton,	Half Day, Ill.
*Sarah M. Frost,	Madison.
Mary E. Gardner,	Prescott.
Alice Hawley,	Madison.
Dracania B. Helms,	Fitchburg.
Ella L. Hoyt,	Manitowoc,
Isadora Jefferson,	Seneca.
Susie A. Kenyon,	Adams.
Kittie Larkin,	Madison.
Ella Larkin,	Madison.
Lovisa A. Lewis,	Mendota.
Mary S. Lyman,	Madison.
Hattie Mann,	Madison.
Carrie Nelson,	Madison.
Emma A. Otto,	Harvey.
Georgiana Palmer,	Madison.
Mary E. Palmer,	Madison.
Estella M. Patton,	Madison.
Emma R. Phillips,	Sun Prairie.
Sarah M. Proudfit,	Madison.
Kittie E. Quiner,	Madison.
Mrs. Nellie Rider,	Ashton.
Emeline E. Rose,	Fitchburg.
Emma Rowe,	Madison.
Emma W. Sharp,	Madison.
Maggie L. Smith,	Wauzeka.
Angie Stowe,	Sun Prairie.
Ellen E. Sweet,	Mt. Vernon.
Sarah Sweet,	Mt. Vernon.
Ella U. Turner,	Madison.
Villa E. Waldron,	Madison.

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*Deceased.

PREPARATORY CLASS.

Luna E. Young,	Fitchburg.
Annie Allen,	Windsor,
Clara M. Ames,	Oregon.
Jennie E. Blanchar,	Windsor.
Mary Burrington,	Windsor.
Ann E. Bush,	Mendota.
Sarah Camp,	Black Earth.
Delia Camp,	Black Earth.
Mary S. Carpenter,	Windsor.
D. A. Charleton,	Verona.
E. J. Charleton,	Verona.
M. J. Charleton,	Verona.
Marion B. Chase,	Madison.
Rebecca A. Clark,	Ashton.
C. J. Clark,	Paoli.
Frances L. Damon,	Burke Centre.
Ellen Daniels,	Madison.
Ellen M. Dodge,	Windsor.
Zenette M. Ellis,	Mt. Horeb.
Mary C. Gilson,	Madison.
Annie M. Gorum,	Madison.
Maggie A Graham,	Ashton.
Mary Makinney,	Mt. Vernon.
Ann Malone,	Mt. Vernon.
Mary E. Malone,	Mt. Vernon.
Emma McManus,	Syene.
Emily J. McLaughlin,	Oregon.
Lovina Meekins,	Belleville.
Mary Morse,	Windsor.
Olive A. Morris,	McFarland.
Katy Morrison,	Madison.
Jarah J. Officer,	Springville.
Helen Ormsby,	Wauzeka.
Ella M. Paine,	Madison.
Loesa Parfrey,	Windsor.
Hattie S. Piper,	Yorkshire, N. Y.
Nellie A. Bees,	Ashton.
Nellie A. Root,	Verona.
May Rowbotham,	Sun Prairie.
Eliza A. Rowley,	Middleton.
M. O. Severson,	Cambridge.
Mary E. Shumway,	Mt. Vernon.
Mary J. Smith,	Burke Center.
Honor Smith,	Wauzeka.
Ella M. Snow,	Madison.
Jennie Stowe,	Sun Prairie.
Frankie C. Tipple,	Rutland.
Jennette Thompson,	Burke.
Alicia Thompson,	Sun Prairie.
Julia F. Thompson,	Sun Prairie.
Orcelia S. Trevett,	Mt. Horb.
Addie Wadsworth,	Pecatonica, Ill.
Kittie Wheelwright,	Middleton.
Adaline Zink,	Verona.

STUDENTS IN SELECT COURSE.

GENTLEMEN.

Francis M. Ames,	Oregon.
Luther J. Andrews,	Troy Grove.
Omar J. Arnold,	Fennimore.
Wm. A. Barritt,	Watertown.
Peter Bechtel,	Blooming Grove.
Nelson B. Bergh,	Deerfield.
Norwood Bowers,	Clinton.
Mitchel H. Brown,	Sun Prairie.
Robt. H. Brown,	Sun Prairie.
Jas. Bullock,	Springfield.
Edward Burke,	Monchess.
Henry B. Chetlain,	Galena.
Wm. Crawford,	Marengo, Ill.
Asbury M. Daggett,	Madison.
Alonso H. Davis,	Bristol Co., Mass.
Henry Deming,	Leicester.
Walter M. Dick, Jr.,	McFarland.
Michael J. Divet,	Fitchburg.
Lewis F. Dunn,	Elk Grove.
Henry G. Ellsworth,	Miflin.
Chas. H. Faulkes,	Belleville.
Estley Fish,	Leyden.
Thad. M. Flower,	Madison.
George Fox,	Oregon.
Wm. Fox,	Oregon.
Chas. S. Fuller,	Leicester.
John Gallagher,	Blooming Grove.
Edward W. Gilmore,	Baraboo.
Joseph H. Gundry,	Mineral Point.
J. C. Haight,	Blooming Grove.
Thos. C. Hayden,	Sun Prairie.
Reuben E. Helms,	Madison.
Jno. C. Henry,	Verona.
Harvy V. Hicks,	Juda.
Albert Houkeness,	Windsor.
Geo. M. Illingworth,	Montrose.
John M. Johnson,	Vienna.
Anthony A. Keenan,	McFarland,
Allen Kendall,	Prairie Du Sac.
John Kenealy,	Monchess.
John Kremer,	Sauk City.
Robert Lamont,	Verona.
Frank Larkin,	Madison.
Lars J. Larson,	Windsor.
Edward F. Lazier,	Fitchburg.
Stephen Leahy,	Portland.
Joseph A. Mann,	Fitchburg.
Geo. F. Martin,	Mineral Point.
John W. Martin,	Fennimore.
William McCormick,	Virden, Ill.
Allen E. McManus,	Fitchburg.
Jesse W. Monk,	Canada West.
Francis Mullen,	Greenfield.
Able N. Nye,	Syene.

Hiel F. Orvis,	Mackford.
Jas. T. Parkinson,	Mineral Point.
Thos. T. Parmle,	Mineral Point.
Geo. H. Phelps,	Markesan.
Griffith R. Pierce,	Brownsville, Minn.
David C. Reed,	Green Lake,
Frank L. Rodgers,	McFarland.
Frank G. Rodolph,	Orion.
Selden Rood,	Sun Prairie.
Howard Rood,	Sun Prairie.
Geo. D. Ross,	Waupaca.
Joseph Ryan,	Moncheas.
Carles Schauntz,	Addison.
Stewart D. Shelden,	Madison.
Lewis S. Shumway,	Mount Vernon.
Thos. J. Sloan,	Watertown.
Sam'l K. Smith,	Burke Center.
John L. Smith,	Carroll, Ill.
Henry J. Southerland,	Syene.
Quincy Southerland,	Syene.
Geo. Spragg,	Vienna.
Theodore T. Stair,	Juda.
Marcus T. Terwilliger,	Fitchburg.
David B. Van Bergen,	Madison.
Daniel D. Vincent,	Windsor.
Hiram Vroman,	Stoner's Prairie.
Sam'l Waldron,	Verona.
William L. Warren,	Madison.
Geo. W. Wilder,	Sun Prairie.
David O. Zook,	Oregon.

LADIES.

Mary A. Allen,	Black Earth.
Lettie E. Bentley,	Monroe.
Helen M. Bingham,	Monroe.
Ellen M. Bloom,	Monroe.
Emma Bliss,	Readstown.
Pamelia M. Boutelle,	Amber, N. Y.
Mary H. Bray,	Madison.
Flavia A. Camp,	Black Earth.
Susan C. Carpenter,	Windsor.
Laura A. Newton,	Oregon.
Hattie E. Pease,	Belleville.
Harriet E. Pelton,	Leyden.
Lou. A. Rittenhouse,	Monroe.
Elizabeth Robson,	Madison.
Olyette Smith,	Windsor.
Gertrude E. Tipple,	Rutland.
Lizzie Thompson,	Sun Prairie.
Rhoda J. Trussel,	Madison.

SUMMARY.

Students in College Classes,	[illegible]
Normal Classes,	66
Preparatory Classes, Gentlemen,	44
Preparatory Classes, Ladies,	58
Select Course, Gentlemen,	84
Select Course, Ladies,	18
Total,	306

TERMS OF ADMISSION.

No one can be admitted to the Preparatory School under the age of twelve years, nor to the Freshman Class till he has completed his fourteenth year.

Candidates for admission to the Freshman Class must pass a satisfactory examination in all the studies of the Preparatory Course, or their equivalents.

The requirement for admission to the first year of the Scientific Course is the same, omitting the Ancient Languages, as for the Classical Course.

Candidates for admission to the Normal Course must pass a satisfactory examination in the Outlines of Geography, Elements of English Grammar, and Arithmetic to Proportion.

Candidates for admission to an advanced standing in any of the regular classes must pass examination in all the studies to which the class they propose to enter have attended, or in others equivalent.

The stated time for the examination of candidates for admission, is the first day of each term. Persons may be examined, however, at any time during the term.

Applicants for admission from any other College must present certificates of honorable dismission from such institution.

Students are admitted to the University from other States.

SUBJECTS OF INSTRUCTION.

CLASSICAL COURSE.

FRESHMAN CLASS.

FIRST TERM.

Mathematics,	Algebra.
Latin,	Livy, Lincoln's.
Greek,	Xenophon's Anabasis.
History,	General.

SECOND TERM.

Mathematics,	Algebra completed—Solid and Spherical Geometry,
Latin,	Livy continued.
Greek,	Xenophon's Memorabilia.
History,	United States.

THIRD TERM.

Mathematics,	Plane Trigonometry, Spherical Trigonometry, Mensuration Surveying and Navigation.
Latin,	The Odes of Horace.
Greek,	Xenophon's Memorabilia continued,

SOPHOMORE CLASS.

FIRST TERM.

Mathematics,	Conic Sections and Analytical Geometry—Coffin.
Latin,	Horace—Satires.
Greek,	Homer—Iliad, Owen's.
German,	Ahn's Method.

SECOND TERM.

Mathematics,	The Calculus.
Latin,	Horace—Epistles.
Greek,	Homer.
German,	Translation from German into English—Select Readings.

THIRD TERM.

Mathematics,	Applications of the Calculus, Mechanics—Snell's Olmsted.
Latin,	Horace Completed.
Greek,	Homer, Sophocles.
German,	Reading of Schiller's or Goethe's plays and of selections from the best prose writers.

JUNIOR CLASS.

FIRST TERM.

Natural Philosophy,	Hydrostatics, Pneumatics, Acoustics—Snell, and Lectures.—
Latin,	Tacitus—Germania and Agricola.
Greek,	Demosthenes de Corona, or Thucydides.
Rhetoric,	Blair, and Lectures.

SECOND TERM.

Natural Philosophy,	Electricity and Optics—Snell, and Lectures.
Astronomy,	Snell's Olmsted.
Latin,	Tacitus or Juvenal.
Greek,	Plato, Thucydides, or the Clouds of Aristophanes.
Philosophy,	Haven, and Lectures.

THIRD TERM.

Astronomy,	Loomis.
Latin,	Juvenal and Persius.
Greek,	Æschylus.
Law,	Kent—Vol. 1.
British Constitution,	Creasy and Blackstone.

SENIOR CLASS.

FIRST TERM.

Political Economy	Wayland.
English Literature	Shaw.
Chemistry	Chemical Physics, Non-Metallic Elements, Technology—Lectures and Class Discussions.
French	Robertson's Method.

SECOND TERM.

English Literature	Completed.
Logic	Whately.
Chemistry	Metals, Metallurgy—Lectures, and Class Discussions.
Geology	Lectures and Class Discussions.
French	Readings of Chapsal's Leçons et Modeles de Literature Française.

THIRD TERM.

Ethics	Haven's and Selections from Paley.
Evidences	Lectures.
Organic Chemistry	Lectures and Class Discussions.
Botany	Lectures and Class Discussions.
Physiology	Lectures and class discussions.
French	Lectures and Class Discussions.
	Review of Grammar.

SCIENTIFIC COURSE.

This is the same as the Classical Course, the Ancient Languages being omitted. Most of those, however, who take this course, study Latin, which is earnestly recommended.

NORMAL COURSE.

JUNIOR YEAR.

FIRST TERM.

Mathematics	Higher Arithmetic, Mental and Written.
Language	Grammar, Verbal Analysis, Syntax.
	Geography and Map drawing.
	General Exercises.

SECOND TERM.

Mathematics	Higher Arithmetic completed.
Language	Grammar, Verbal and Sentential Analysis.
Natural Science	Physiology.
	General Exercises.

THIRD TERM.

Mathematics	Elementary Algebra.
Language	Composition,
Natural Science	Physical Geography.
History	United States.

MIDDLE YEAR.

FIRST TERM.

Mathematics	Elementary Algebra, completed.
Language	Rhetoric.
Natural Science	Natural Philosophy.
	Constitution and Science of Government.

SECOND TERM

Mathematics,	Geometry.
Language,	Criticism and English Literature.
Natural Science,	Zoology.
	Political Economy.

THIRD TERM.

Mathematics,	Higher Algebra.
Language,	German.
Natural Science,	Botany.
Philosophy,	Mental.

SENIOR YEAR.

FIRST TERM.

Mathematics,	Algebra, completed.
Language,	German.
Natural Science,	Chemistry.
Philosophy,	Moral.

SECOND TERM.

Mathematics,	Geometry.
Language,	German.
Natural Science,	Geology.
History,	Ancient.

THIRD TERM.

Mathematics,	Trigonometry and Surveying.
Language,	Science of Language.
Natural Science,	Astronomy.
Language,	Essays.

In the Theory and Practice of Teaching, including object lessons, oral instruction, etc., will be given by lectures and from reference books in the Normal Library throughout the course,—and during the last year the pupils will be thoroughly reviewed in Educational History.

General exercises in Reading, Orthography, Writing, Declamation and Recitation throughout the course.

Latin or French will be accepted, in graduating, for German.

SELECT COURSE.

Persons desirous of pursuing selected studies are admitted to any of the recitations and other exercises of the regular classes for which they may be prepared, and, as far as it can be done, such additional classes will be formed for their accommodation as may be needed. Such students are entitled to a certificate of the time of membership, of the subjects studied, and of their standing in the same.

PREPARATORY COURSE.

FIRST YEAR.

English Studies.—Quackenbos' First Lessons in English Composition, Ray's Intellectual Arithmetic, Robinson's Higher Arithmetic commenced, Geography, Wells' Science, Parker & Watson's National Reader.

Latin.—Andrews and Stoddard's Grammar and Reader.

SECOND YEAR.

English Studies.—Arithmetic completed, Ray's Algebra, First Part, Physical Geography.

Latin.—Three Books of Cæsar, Frieze's Virgil, commenced.

Greek.—Grammar and lessons.

THIRD YEAR.

English Studies.—Plane Geometry and General Review of Arithmetic, Grammar and Geography.

Latin.—Virgil continued, Johnson's Cicero.

Greek.—Xenophon's Anabasis.

Exercises in Elocution, Reading and Spelling daily—in Declamation, Composition and Disputation weekly, throughout the course,

The above course will be strictly adhered to; and only in special cases will students be admitted to the Freshman Class until they have compleed the work of preparation as prescribed, or its equivalent.

MISCELLANEOUS.

NORMAL DEPARTMENT.

This department was opened March 16th, 1863, since which time it has been in successful operation. The primary aim of the department is to fit teachers for their work; but any who desire to pursue the higher English Branches will be admitted to its classes.

The entire South Dormitory Building, excepting rooms for the Dean of the Faculty, has been set apart for a Boarding house, Dormitories and other rooms necessary for the department, and will be under the special charge of the Professor of the department, aided by the preceptress.

Ladies desiring board will be received into the family of the Professor, and it will be the aim to make both the privileges and restraints as home-like as possible.

A few rooms will be rented in the building to ladies desiring to board themselves; such tenants will, however, be under the same regulations as members of the family.

Gentlemen can procure board in the Dining Hall, and rooms in the North Dormitory Building, or they can obtain board and rooms at reasonable rates, in families not far distant.

PREPARATORY SCHOOL.

The primary object of this school is to prepare young men for the College Classes in the University. Pupils from other departments, however, are admitted to its classes under such conditions as the faculty may prescribe.

Boys in preparatory studies, who reside in town, or who are too young to be permitted to occupy rooms in the Dormitory Building, are required to study under the eye of the Principal during school-hours. Pupils connected with this school are carefully instructed not only in Latin and Greek, but in the Elements of English, the Principal being assisted, as occason requires, by other members of the Faculty.

The Preparatory School is now in charge of Orson V. Tousley, A. M., a gentleman of eminent qualifications for the place, and who has had a long and successful experience as teacher and disciplinarian.

EXAMINATIONS.

At the close of the first and second terms all the classes of the University are examined before the Faculty in the studies of the term.

During the week preceeding Commencement, the several classes are examined in presence of a Board of Visitors, on the studies of the year. Promotion from class to class is made to depend on such examination.

DEGREES.

The degree o Bachelor of Arts in conferred on those students of the University who have completed the Classical Course, and the degree of Bachelor of Philosophy on those who have completed the Scientific Course. It is a rule of the Board of Regents, however, to confer these degrees only upon such as have been recommended by the faculty as having pursued all the studies prescribed and having passed satisfactory examinations on the same.

Those who have received from the University the degree of bachelor of Arts may, after three years standing, on recommendation of the Faculty, receive the degree of Master of Arts.

Those students of the Universty who have satisfactorly completed the Normal Course are entitled to a diploma of graduation, under seal of the University.

LIBRARY, CABINETS, &c.

The University Library comprises about three thousand volumes.

The institution is provided with valuable Geological and Mineralogical Cabinets and collections in Natural History; also with well selected Philosophical and Chemical Apparatus.

LITERARY SOCIETIES.

The two Literary Societies—Athenæan and Hesperian—are sustained with great interest, and furnish valuable aid in the intellectual training of the student. Each has a library of several hundred volumes. Spacious and commodious rooms, in University Hall, have been provided and furnished, at the expense of the institution, for the use of these societies.

A third society, called the Castalian, has been organized and sustained for more than a year by the young ladies of the Normal Department, and has proved a great aid in their literary culture. A hall has been provided and furnished for the use of this society in the south building.

RELIGIOUS EXERCISES.

The students and Faculty are assembled for prayers daily in the University Chapel, fifteen minutes before the morning hour for commencing recitations.

It is also a rule of the institution that all students attend church at least once on the Sabbath, unless specially excused.

ROOMS.

Private rooms in the North Dormitory Building, under certain restrictions, can be secured by gentlemen on application to the locating officer, at the opening of each term.

No student will be allowed to occupy a room until his bills for the term are settled.

Students in the regular University classes, in previous occupancy, will be allowed to retain their rooms, if on the ground at the opening of the term.

Students from abroad, admitted to the University classes, are allowed the choice of rooms.

Rooms are furnished at the expense of the students, who should bring their own bedding, towels, etc.; other furniture can be obtained here second-hand, or new, at moderate prices.

Occupants of rooms are held responsible for all damages to the same.

Students not accomodated in the University, and not residing with their parents in Madison, will lodge and board in town, under such regulations as the Faculty may prescribe.

Students of suitable age, in the Preparatory Department, are allowed to occupy private rooms in the Dormitory Building.

TERMS AND VACATIONS.

The Commencement Anniversary is on the *last Wednesday of June*, and is followed by a vacation of nine weeks.

There are three terms of thirteen weeks each in the year; and three vacations, one of nine and the others of two weeks each.

The *first term*, therefore, opens on Wednesday, nine weeks from Commencement. and each of the other terms on Wednesday, two weeks from the close of the preceding term.

EXPENSES.

University charge (for tuition, room and heat) per term,	$10	50
Tuition, without private room, per term,	6	00
Tuition, for less than a whole term, per week,		60
Room-rent and fuel, for less than a term, per week,		50

Payment of the above charges is required strictly *in advance*.

Students will be charged for not less than half a term, and no deduction will be made for absence during the last two weeks of the term, except in case of sickness·

Table board in the family of one of the professors residing in South Dormitory Building, will until further notice, be furnished to regular boarders at cost, $25 being required in advance, and the balance at the middle of the term.

There are no extra charges except for actual damages done by students.

It is the object of the University to afford to the youth of the State, the best education, both Scientific and Practical, and at the lowest rates.

At no similar institution in the land are the expenses of education less than in the University of Wisconsin.

The location of the institution it is well known, is among the most beautiful and healthful any where to be found.

NOTE.—The Board of Regents may, at their next meeting, decide to heat the rooms with stoves instead of furnaces. If so, the above table of expenses will be somewhat modified.

CALENDAR FOR 1865-6.

First Term begins August 30th, 1865, and closes November 28th, 1865.

Second Term begins December 18th, 1865, and closes March 13th, 1866.

Third Term begins March 28th, 1866, and closes June 27th, 1866.

Commencement Anniversary. Wednesday, June 27th, 1866.

Graduating Exercises of Normal Department—Tuesday afternoon before Commencement.

Anniversary of Literary Societies, Monday evening, June 25th 1866.

Society Exhibition—close of First term.

Alumni Addresses—evening before Commencement Day.

Alumni Meeting—afternoon of Commencement Day.

ALUMNI ASSOCIATION

President.

SIDNEY FOOTE.

Vice President.

J. D. PARKINSON.

Corresponding Secretary.

LEVI M. VILAS.

Recording Secretary.

WILLIAM W. CHURCH.

Treasurer.

T. D. CORYELL.

Executive Committee.

SIDNEY FOOTE,
WILLIAM F. VILAS,
CHARLES T. WAKELEY
JAMES F. FLOWER.
LEVI M. VILAS.

Orator, SIDNEY FOOTE,
Alternate, T. D. CORYELL.

Poet, J. D. PARKINSON,
Alternate, G. W. BIRD.

Literary Anniversary, **Tuesday Evening, preceding Commencement.**
Business Meeting and Alumni Dinner, **Afternoon of Commencement Day.**

ANNUAL REPORT OF THE REGENTS

OF THE

UNIVERSITY OF WISCONSIN,

FOR THE

YEAR ENDING SEPTEMBER 30, 1866.

AN ACT

957

Donating public lands to the several states and territories which may provide colleges for the benefit of Agriculture and the Mechanic Arts.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That there be granted to the several states for the purposes hereinafter mentioned an amount of public land to be apportioned to each state, a quantity equal to thirty thousand acres for each senator and representative in congress to which the states are respectively entitled by the apportionment, under the census of eighteen hundred and sixty: *provided*, that no mineral lands shall be selected or purchased under the provisions of this act.

SECTION 2. *And be it further enacted*, That the land aforesaid after being surveyed, shall be apportioned to the several states in sections or subdivisions of sections not less than one quarter of a section, and whenever there are public lands in a state subject to sale at private entry at one dollar and twenty-five cents per acre, the quantity to which said state shall be entitled shall be selected from such lands within the limits of such state, and the secretary of interior is hereby directed to issue to each of the states in which there is not the quantity of public lands subject to sale at private entry at one dollar and twenty-five cents per acre to which said state may be entitled under the provisions of this act, land scrip to the amount in acres for the deficiency of its distribution share; said scrip to be sold by said state and the proceeds thereof applied to the uses and purposes prescribed in this act, and for no other use or purpose whatsoever; *provided*, that in no case shall any state to which land scrip may thus be issued be allowed to locate the same within the limits of any other state or of any territory of the United States, but their assignees may thus locate said land scrip upon any of the unappropriated lands of the United States, subject to sale at private entry at one dollar and twenty-five cents or less per acre; *and provided further*, that not more than one million acres shall be located by such assignees in any one of the states; *and provided further*, that no such location shall be made before one year from the passage of this act.

SECTION 3. *And be it further enacted*, That all the expenses of management, superintendence and taxes from date of selection of said lands previous to their sales, and all expenses incident in the management and disbursement of the moneys which may be received therefrom shall be paid by the states to which they may belong, out of the treasury of said states, so that the entire proceeds of the sale of said lands shall be applied without any diminution whatever to the purposes hereinafter mentioned.

SECTION 4. *And be it further enacted*, That all moneys derived from the sale of the lands aforesaid by the states to which the lands are apportioned, and from the sales of land scrip herein before provided for, shall be invested in stocks of the United States or of the states or some other safe stocks, yielding not less than five per centum upon the par value of said stocks, and that the money so invested shall constitute a perpetual fund, the capital of which shall remain forever undiminished (except so far as may be provided in section fifth of this act,) and the interest of which shall be inviolably appropriated by each state which may take and claim the benefit of this act to the endowment, support and maintenance of at least one college where the leading object shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts in such manner as the legislatures of the states may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life.

Section 5. *And be it further enacted*, That the grant of land and land scrip hereby authorized shall be made, on the following conditions to which as well as to the provisions hereinafter contained, the previous assent of the several states shall be signified by legislative acts: *First*—if any portion of the fund invested as provided by the foregoing section or any portion of the interest thereon shall by any action or contingency be diminished or lost, it shall be replaced by the state to which it belongs, so that the capital of the fund shall remain forever undiminished, and the annual interest shall be regularly applied without diminution, to the purposes mentioned in the fourth section of this act, except that a sum not exceeding ten per centum upon the amount received by any state under the provisions of this act may be expended for the purchase of lands for sites or experimental farms whenever authorized by the respective legislatures of said states. *Second*—no portion of said fund nor the interest thereon shall be applied directly or indirectly under any pretence whatever, to the purchase, erection, preservation or repair of any building or buildings. *Third*—any state which may take and claim the benefit of the provisions of this act shall provide within five years at least, not less than one college, as described in the fourth section of this act, or the grant to such state shall cease, and said state shall be bound to pay the United States the amount received of any lands previously sold, and that the title to purchasers under the state shall be valid. *Fourth*—an annual report shall be made regarding the progress of each college, recording any improvements and experiments made, with their costs and results and such other matters, including state, industrial and economical statistics as may be supposed useful, one copy of which shall be transmitted by mail free, by each, to all the other colleges which may be endowed under the provisions of this act and also one copy to the secretary of the interior. *Fifth*—when lands shall be selected from those which have been raised to double the minimum price in consequence of railroad grants, they shall be computed to the states at the maximum price, and the number of acres proportionally diminished. *Sixth*—no state while in condition of rebellion or insurrection against the government of the United States, shall be entitled to the benefit of this act. *Seventh*—no state shall be entitled to the benefit of this act unless it shall express its acceptance thereof by its legislature, within two years from the date of its approval by the president.

Section 6. *And be it further enacted*, That land scrip issued under the provisions of this act shall not be subject to location until after the first day of January one thousand eight hundred and sixty-three.

Section 7. *And be it further enacted*, That the land officers shall receive the same fees for locating land scrip issued under the provisions of this act as is now allowed for the location of military bounty land warrants under existing laws; *provided*, their maximum compensation shall not be thereby increased.

Section 8. *And be it further enacted*, That the governors of the several states to which scrip shall be issued under this act shall be required to report annually to congress, all sales made of such scrip until the whole shall be disposed of, the amount received for the same, and what appropriation has been made of the proceeds.

Approved July 2d, 1862.

CHAPTER CXIV—GENERAL LAWS OF 1866.

AN ACT to reorganize and enlarge the University of Wisconsin, and to authorize the county of Dane to issue bonds in aid thereof.

The People of the State of Wisconsin, represented in Senate and Assembly, do enact as follows:

SECTION 1. The object of the University of Wisconsin, shall be to provide the means of acquiring a thorough knowledge of the various branches of learning connected with the scientific, industrial and professional pursuits; and to this end it shall consist of the following colleges, to-wit: 1st. The college of arts; 2d. The college of letters; 3d. Such professional and other colleges as from time to time may be added thereto or connected therewith.

SECTION 2. The college of arts shall embrace courses of instruction in the mathematical, physical and natural sciences, with their applications to the industrial arts, such as agriculture, mechanics and engineering, mining and metallurgy, manufactures, architecture and commerce, in such branches included in the college of letters as shall be necessary to a proper fitness of the pupils in the scientific and practical course for their chosen pursuits, and in military tactics; and as soon as the income of the University will allow, in such order as the wants of the public shall seem to require, the said courses in the sciences and their application to the practical arts, shall be expanded into distinct colleges of the University, each with its own faculty and appropriate title.

SECTION 3. The college of letters shall be coexistent with the college of arts, and shall embrace a liberal course of instruction in language, literature and philosophy, together with such courses or parts of courses in the college of arts, as the authorities of the University shall prescribe.

SECTION 4. The University in all its departments and colleges, shall be open alike to male and female students; and all able-bodied male students of the University, in whatever college, shall receive instruction and discipline in military tactics, the requisite arms for which shall be furnished by the State.

SECTION 5. The government of the University shall vest in a board of regents, to consist of fifteen members, to be appointed by the Governor, two from each Congressional district in the State, and three from the State at large. At the first appointment, which shall be within sixty days ofter the passage of this act, five shall be commissioned for one year, five for two years, and five for three years. Thereafter the full term of office shall be three years from the first Monday in February in the year in which they were appointed, unless sooner removed by the Governor.

SECTION 6. The said board of regents shall succeed to the custody of the books, records, buildings and all other property of the university; and the present board of regents shall be dissolved immediately upon the organization of the board herein provided for: *provided*, that all contracts legally made and at that time binding upon the board thus dissolved, shall be assumed and discharged by their successors.

SECTION. 7. The regents and their successors in office shall constitute a body corporate, with the name and style of "the regents of the university of Wisconsin," with the right as such of suing and being sued, of contracting and being contracted with, of making and using a common seal, and altering the same at pleasure. They shall have power, and it shall be their duty to enact laws for the government of the university in all its branches; to elect a president of the university, and the requisite number of professors, instructors, officers and employees, and to fix their salaries, also the term of office of each, and to determine the moral and educational qualifications of applicants for admission to the various courses of instruction: *provided*, that no instruction, either sectarian in religion, or partisan in politics, shall ever be allowed in any department of the university, and no sectarian or partisan test shall ever be allowed or exercised in the appointment of regents, or in the election of professors, teachers, or other officers of the university, or in the admission of students thereto, or for any purpose whatever.

SECTION 8. For the time being, an admission fee and rates of tuition, such as the board of regents shall deem expedient, may be required of each pupil, except as hereinafter provided; and as soon as the income of the university will permit, admission and tuition shall be free to all residents of the state; and it shall be the duty of the regents, according to population, to so apportion the representation of students, that all portions of the state shall enjoy equal privileges therein.

SECTION 9. One suitably qualified pupil from each assembly district, to be nominated by the representative of such district in the legislature of the state, who, other things being equal, shall prefer an orphan of a soldier who has died in defense of his country, shall be at once and always entitled to free tuition in all the colleges of the university.

SECTION 10. The president of the university shall be president of the several faculties and the executive head of the institution, in all its departments. As such, he shall have authority, subject to the board of regents, to give general direction to the practical affairs and scientific investigations of the several colleges, and in the recess of the board of regents, to remove any employee or subordinate officer, not a member of the faculty, and to supply, for the time, any vacancies thus created; and so long as the interests of the institution require it, he shall be charged with the duties of one of the professorships. The secretary of state shall be secretary of the board of regents, and shall keep a faithful record of all the transactions of the board of regents, and perform such duties as they shall impose. The state treasurer shall be the treasurer of the board of regents, and perform all the ddties of such office.

SECTION 11. The immediate government of the several colleges shall be intrusted to their respective faculties; but the regents shall have power to regulate the courses of instruction, and prescribe the authorities to be used in the several courses, and also to confer such degrees and grant such diplomas as are usual in universities, or as they shall deem appropriate.

SECTION 12. At the close of each fiscal year, the regents, through their president, shall make a report in detail to the governor, exhibiting the progress, condition and wants of each of the colleges embraced in the university, the course of study in each, the number of professors and students, the amount of receipts and disbursements, together with the nature, costs and results of all important investigations and experiments, and such other information as they may deem important; one copy of which shall be transmitted, free, by the secretary of state to all colleges endowed under the provisions of the congressional act of July 2d, 1862, hereinbefore referred to, and also one copy to the secretary of the interior, as provided in said act.

SECTION 13. For the endowment and support of the university, there are hereby appropriated: 1st. The income of the university fund. 2d. The income of a fund to be derived from the sales of the two hundred and forty thousand acres of land granted by congress to the state of Wisconsin, by virtue of an act approved July 2d, 1862, entitled "an act donating land to the several states and territories which may provide colleges for the benefit of agriculture and the mechanic arts," which fund shall be designated as the agricultural college fund. 3d. All such contributions to the endowment fund, as may be derived from public or private bounty. The entire income of all said funds, shall be placed at the disposal of the board of regents, for the support of the aforesaid colleges of arts, of letters, and of such colleges as shall be established in the university, as provided in section two of this act: *provided*, that all means derivable from other public or from private bounty, shall be exclusively devoted to the specific object for which they shall have been designed by the grantor.

SECTION 14. Meetings of the boord may be called in such manner as the regents shall determine, a majority of whom shall constitute a quorum for the transaction of business, but a less number may adjourn from time to time. No member of the board shall receive compensation for his services as such member, but each member shall be entitled to reimbursement, on the audit of the board, for his traveling and other necessary expenses while employed on the business of the board.

SECTION 15. The first meeting of the regents, the appointment of which is herein provided for, shall be held in the university edifice, on the last Wednesday of June, 1866, at which time the regents when so convened, shall elect one of their number president of the board. The time for the annual election of president of the board of regents, as also the regular annual meeting, and such other meetings as may be required, shall be determined in the by-laws of the board. Immediately upon the organization of the board, it shall be their duty to make arrangements for securing, without expense to the state, or to the funds of the university, suitable lands in the immediate vicinity of the university, not less than two hundred acres, including the university grounds, for an experimental farm, and as early as possible thereafter, to make such improvements thereon as will render it available for experimental and instructional purposes, in connection with the agricultural course in the college of arts.

SECTION 16. To enable the board of regents to purchase lands in the vicinity of the university for an experimental farm, and to improve the same, the board of supervisors of Dane county are hereby authorized and empowered to issue the bonds of said county, bearing interest at the rate of seven per cent. per annum, interest payable annually, for the amount of forty thousand dollars, such bonds to be payable on or before the first day of January, A. D. 1886, at such place as may be determined by said board of supervisors. The bonds so issued shall be delivered to the board of regents of the university, who shall faithfully apply the same, or the proceeds thereof, together with all contributions made for this specific purpose, to the purchase and improvement of the lands for such experimental farm. But if the said county of Dane, by its proper officers, shall not make provision for the issue and payment of said bonds as aforesaid within thirty days after the passage of this act, and if in such case the citizens of said county shall fail within days after the expiration of said first mentioned period of thirty days, to furnish guarantees satisfactory to the secretary of state that the said amount of forty thousand dollars shall be placed at the disposal of the regents of the university, at the first meeting of the board, then this act shall be null and void.

SECTION 17. So much and such parts of chapter twenty-one of the revised statutes, and of any and all acts as contravene the provisions of this act, are hereby repealed.

SECTION 18. This act shall take effect and be in force from and after its passage.

Approved April 12, 1866.

ANNUAL REPORT OF THE REGENTS

OF THE

UNIVERSITY OF WISCONSIN,

FOR THE

YEAR ENDING SEPTEMBER 30, 1866.

To His Excellency, LUCIUS FAIRCHILD,
Governor of Wisconsin:

GOVERNOR:—Pursuant to the provisions of chapter 114 of the General Laws of 1866, entitled "An act to reorganize and enlarge the University of Wisconsin and to authorize the county of Dane to issue bonds in aid thereof," I have the honor to submit to you the annual report of the "Regents of the University of Wisconsin" appointed under that act.

The county of Dane having made provision for the issue of $40,000 of bonds authorized by said act in aid of the university, the regents held their first meeting on the twenty-seventh day of June last, perfected their organization, received said bonds and succeeded to the custody of the books, records, buildings and all other property of the university delivered to them by the former board of regents. Hence this report can only properly embrace the action of this new board of regents since their organization from June 27th to October 1st of the present year and must be principally confined to the efforts made by them in the reorganization of the institution and its present condition.

EXPERIMENTAL FARM.

By section 15 of the organic act it is provided that "immediately upon the organization of the board, it shall be their duty to make arrangements for securing, without expense to the State or to the funds of the university, suitable lands, in the immediate vicinity of the university, not less than two hundred acres, including the university grounds, for an experimental farm, and as early as possible thereafter, to make such improvements thereon as will render it available for experimental and instructional purposes in connection with the agricultural course in the college of arts." In obedience to this provision, the board of regents, after a full and thorough examination of such lands as were offered to them for that purpose and such others as they believed could be obtained, have purchased for this experimental farm a piece of land embracing that part of section 14, in township seven, north of range nine east, which lies west of the university grounds, and that part of section 23 in the same township and range which lies between the Sauk road on the south and the tract in section 14 adjoining on the north, also five town lots adjoining the university grounds on the south-west corner, comprising in all about 195 acres and including Professor Read's and Mrs. Hobbins' stone and brick dwellings, at an aggregate cost of $27,054. Application has been made to the proper authorities for the vacation of the streets intersecting the town lots purchased, which will undoubtedly be granted

The University grounds proper, heretofore belonging to the institution, contain 40 63-100 acres; they are contiguous to the above described piece and with it form *one* tract with an area of over 235 acres. The utility and advantage of having the experimental farm so closely connected with the institution of which it is to form an important part, must be apparent to every one. The land purchased is, according to the opinion and judgment of all such members of the board as are practically familiar with farming, and of all such persons as could be consulted by individual members of the board and as had given thought and study to the establishment of experimental farms, peculiarly well adapted for this purpose on account of the great many varieties and differences in its soil and location. It is to be borne in mind, that the object in view is the establishment of an *experimental farm*, where agriculture is to be practically taught by experimenting on different soils and location of the land, and *not a model farm*, where the best kind and largest quantity of particular products are sought to be obtained from a particular priece of land The board believe that by this purchase they have secured to the University for a reasonable price the best possible piece of land for that purpose. The buildings too, which are upon the land, will be of great and immediate usefulness to the institution in its contemplated development.

The lateness of the season and other difficulties and disappointments which the regents met with in their endeavors to organize the institution, and which will be more fully referred to hereafter, have prevented them in this year from making any improvements upon the lands purchased by them; but they confidently expect that next year will see the experimental farm in practical operation.

HYPOTHECATION OF BONDS.

In order to meet the payments for the purchase of the land, the regents ascertained that they would be compelled to sell the bonds of Dane county donated to them for that purpose, at a discount of at least twenty per cent. This seemed to them a very unnecessary sacrifice, since a portion of the other funds of the University might with perfect safety and propriety be invested in those bonds, which bear the same interest that the university funds bring in other investments. The difficulty was, that the law now forbids such investment. The regents therefore made such arrangements, as will make it possible to save the loss of discount, if the legislature should sanction the proposed investment. They hypothecated $36,000 of those bonds with several persons who advanced thereon eighty per cent. so conditioned that they should be redeemed by the 1st day of April, 1867. It is confidently expected by the regents that before that date the legislature will sanction the investment of $40,000 of the university funds in those bonds and will thus save the university $8,000.

EMBARRASSMENTS OF RE-ORGANIZATION.

No one at all familiar with the history of the state university can have failed to observe that one of the principal causes of its apparent want of success lay in the fact that the institution was attempted to be managed for many years without a chancellor, a necessity to which the former board of regents was compelled to submit to on account of the crippled financial condition of the institution, and the insufficiency of its income. It is true the new board found the university, so far as its available means of support are concerned, in scarcely a better condition, while the act of reorganization calls for a much more extended field of instruction than had heretofore been given; but considering the fact that the agricultural college fund had been given to the institution which in a few years must considerably increase its income, that the annual expenses heretofore charged by the State for the management of its fund were in future not to be withdrawn from its resources, that the legislature had required the regents to undertake the re-organization upon this more extended plan, and that the people of the state began to manifest a more lively interest in it, the regents at their very first meeting, concluded that, to the extent of their ability, they would attempt the reorganization in the manner indicated by the organic act, trusting that the people, through their legislature, would not withhold substantial aid from the university, if it should appear that its prerent income is insufficient for its support. Hence they determined to commence the work of reorganization by first endeavoring to obtain the services of a fit and capable person as "president of the university," and then, by and with his advice and assistance, to elect the requisite instructionary force and to prescribe the courses of study and the rules of management of the institution; and this course seemed to them not only eminently proper in itself, but actually commanded by section 7 of the organic law. Their first choice fell upon Hon. J. L. Pickard, formerly for many years superintendent of public instruction in this State, and now superintendent of schools at Chicago; but owing to some misunderstanding or other circumstances, the regents were finally disappointed by Mr. Pickard's declining to accept the position tendered him. They next tendered the office of president of the university to Professor P. A. Chadbourne of William's College, Massachusetts, a gentleman whom they deemed in every respect well qualified and particularly fitted for the position, and of whom they had good reason not to expect a refusal. Unfortunately, circumstances beyond the control of the board of regents, finally induced Mr. Chadbourne, after he had twice visited this State at the solicitation of the board, and the last time with the expectation of accepting the place tendered him, to decline.

This threw the Board of Regents in great perplexity concerning the reorganization of the institution; the usual time for commencing instruction was near at hand; the hope of obtaining a president and with his advice to re-model and start the institution in time for the usual fall opening of instruction, had to be altogether abandoned, and practically, the Regents were compelled to decide upon the question whether they would, for the present continue the insturuction in the University and its management substantially as it had been heretofore, or whether, in order to be able to commence anew, under the guidance of a proper executive head, they would suffer it to be closed. The latter course would have involved a loss of all those students who, having commenced their studies at the University, were intending there to finish them. It was known that a large number of young men throughout the State were anxiously waiting for the commencement of instructions here, it was supposed that the act of reorganization did not contemplate a cessation of instruction at the University for any unusual length of time, and therefore, for these and other reasons, the Regents concluded to open the usual course of instruction on the 16th of October, to retain the faculty heretofore employed, and for the present to continue substantially the course of instruction heretofore given, with the addition of providing for a professorship of Agriculture and filling its chair.

FEMALE STUDENTS.

Section 4 of the organic law provides that "the University, in all its departments and colleges, shall be open alike to male and female students." The Regents have encountered serious objections to this provision on the part of educational men and others, and they have become satisfied that an attempt to carry it out in its full scope would be injurious to the future prospects of the University. It is not deemed proper here to enter into a discussion of the question to what extent young men and women can safely and advantageously be educated in the same institution, nor is it here disputed that young women have an equal claim with young men to the facilities of education afforded by a state; but the Regents are convinced that it would be extremely difficult, if not impossible, to secure the services of a thoroughly competent and experienced educational man at the head of the institution, if the law is not so amended as to give the Board of Regents the power to admit female students under such rules and regulations only as experience, prudence and the greatest good of the institution may dictate. It is not their desire to ask the Legislature to exclude females from the University, but they wish to have the necessary authority for the creation of a separate female department and for making the necessary regulations concerning the participation of females in the different branches of University studies. Such an amendment of the law, they deem essential for the future prosperity of the University.

PROFESSOR OF MILITARY SCIENCE.

Under the provisions of a recent act of Congress the Regents made an early application for the detail of a certain officer of the army, highly recommended to them for that purpose, as professor of military science &c., but they have since been informed by the Secretary of War that no officer could be so detailed unless he was disabled or on the retired list. Further steps have since been taken by the Regents to procure the detail of a competent officer for this position.

FINANCIAL CONDITION OF THE UNIVERSITY.

Hereto annexed, marked "Appendix A," is the annual report of the Secretary of State, as Secretary of the Regents of the University for the fiscal year ending September 30th, 1866 From it it will appear that the balance then on hand was only the sum of $5,501.47-100 *and this balance arises from interest drawn in advance* so that under a sound system, its amount should really be large enough to cover all the current expenses of the fiscal year ending September 30th, 1867. It further appears from that report that on the 30th day of September, 1866, the total productive fund of the University proper was $160.230 70-100 and of the agricultural college fund $8,061.85-100, giving a *tatal of all productive funds of the University of* $168,292.55-100 *which will yield an annual income of* $11,780.47-100 *for the support of the University.*

The following is an estimate of the expenses of the University for the current year after the appointment of a president, which should not be long delayed:

Salary of President for 9 months	$2,000
7 Professors	14,000
Janitor	400
Librarian and bell ringer	100
2 assistant teachers	1,400
Insurance	400
Fuel	700
Repairs	1,500
Incidentals	500
Total	$21,000

To meet this, there is an income of interest of $11,780.47-100, which may possibly be increased to $12,000 or, at the utmost, to $13,000, from *expected* sales of lands, and further an estimated income of $3,000 tuition fees and room rent, *making at most an income of* $16,000 *and leaving the expenses to exceed the income at least* $5,000. The tuition fees and room rent may fall much short of the amount above estimated, inasmuch as under the act of reorganization, one student from each Assembly district is entitled to free tuition at the University.

It is perfectly certain that at present and for the next few years to come, until the income from the sales of lands shall be increased, the receipts from present sources will not be sufficient to defray the most necessary expenses of the university, if it is to be properly reorganized with a competent president and faculty, upon the most limited plan of instruction, and without regard to the extraordinary expenses of the agricultural department. If then, the State is to have such an institution of learning, the least it can do is to supply the deficiency which will probably require an annual apprropriation of from $5,000 to $7,000 for the next five years. In order to support the justice of this demand and to show that much more even is justly due from the state to this university, I beg leave here to refer to sec. 6 of article 10 of the constitution which says that "provision *shall be made* by law for the establishment of a state university, * * * The proceed of all lands that have been or may hereafter be granted by the United States to the state for the support of a university, *shall be and remain a perpetual fund*, to be called the "university fund," *the interest of which* shall be appropriated to the support of the state university." It is well known that out of this fund at a cost of over $100,000, land has been purchased and buildings erected by the state for the establishment of the university, thus withdrawing from the support of the university an annual sum of over $7,000 interest. I maintain that the evident intention of the above section of the constitution was that the *state* should furnish the buildings and grounds and not the university fund or its interest, and that therefore the state has improperly caused or suffered the fund to be diverted. If I am correct in this construction, then the state owes the university over $100,000 or at least the actual interest on that sum.

But again ; for many years, until the law was changed last winter, the State took from the university fund income, annually, about $1,000 for the management of its funds, and altogether it has thus appropriated out of the annual interest of this fund the sum of $5,500. So far as the future is concerned, this unjust charge against this institution of learning, which should be established, fostered and cared for by the State has been withdrawn, but the state should in justice refund the sum heretofore taken.

And finally : By the act of Congress granting the agricultural college lands accepted by this State, it was bound to provide the necessary buildings for the astablishment of the agricultural college, and to put it in operation. By uniting this grant with the university, it becomes unnecessary to provide buildings ; but in as much as the income from this fund would for the present be utterly insufficient to maintain a separate college, it is certainly not asking too much that the institution with which it is united should be put upon a basis where it can live.

Two great institutions of learning are united in this university, which, until this year, have never cost the state one cent to support. It is time that Wisconsin should cease standing behind so many of her sister states in regard to this, its highest institution of learning, which should be the pride of its citizens. In other states, where state universities flourish and stand high as institutions of learning, it will be found that they are liberally supported by state donations.

At their first meeting the regents appointed a committee to make an inventory of the property of the university. This committee afterwards made a detailed report, a copy of which is hereto annexed marked "Appendix B." which shows an aggregate value of property of $706,773 52-100 belonging to the university. The productive part of this fund is at present small, but it will increase constantly until the wild lands shall all have been sold. With a little aid from the state now and for the next few years, the institution can be put upon a proper basis, otherwise it is doomed to linger sickly along, a discredit to our State.

October 3d, 1866.

EDWARD SALOMON,
President of the Board of Regents of the University.

APPENDIX.

"A."

ANNUAL REPORT OF THE SECRETARY OF THE REGENTS OF THE UNIVERSITY FOR THE FISCAL YEAR ENDING SEPT. 30, 1860.

To Hon. Edward Salomon, President Regents of University :

SIR : I have the honor to submit the following financial statement of the affairs of the University for the year ending Sept. 30, 1866.

The gross net receipts of interest and penalties belonging to the Income of the University fund are stated, after deducting the amount of interest refunded, and the expenses charged by the state for the care and management of the fund. These expenses and refunded items amount to the sum of $2,676 32. In future all such expenses will be paid from the general fund of the state.

The receipts and disbursements thus stated, are as follows :

RECEIPTS.

Balance University Fund Income Sept. 30, 1865............	$ 212 50	
Interest and penalties, net..............................	15,125 87	
Sale of old furnace,.....................................	25 00	
Tuition fees and room rent,..............................	455 54	
Interest on scrip,.......................................	6 12	
		$15,825 03

DISBURSEMENTS.

Balance due T. Brown, University treasurer........		$1,828 47	
Salaries of Professors..........................	$5,024 64		
Secretary and Janitor,..........................	435 00		
Furniture,......................................	247 25		
Repair of buildings,............................	1,702 37		
Insurance do	393 75		
Interest,.......................................	120 56		
Fuel,...	44 00		
Librarian and bell ringer,......................	91 50		
Books for library,..............................	114 00		
Incidental expenses,............................	322 02		
		8,495 09	10,323 56
Balance on hand Sept. 30, 1866,..............			$5,501 47

In explanation of the above disbursements, it may be stated, that the fees for tuition were not paid into the treasury, with the exception of the small sum of $455.54 ; but were applied to the payment of the Professors and assistants in addition to the amount of salaries reported above. These fees are supposed to have amounted to about $3,500.00 or $4,000. The expense for fuel was trifling, there being a large stock on hand at the commencement of the year.

The following is a condensed statement of the receipts and disbursements of the University Fund Income for the fiscal year, ending September 30th, 1866 :

RECEIPTS.

Interest,....	$17,149 85
Trespass,	20 00
Transferred from Normal School Fund Income,	624 50
" " School " "	7 84
	$17,802 19

DISBURSEMENTS.

State University,		9,836 90
Clerk hire,		675 00
Advertising,		85 05
Protecting lands,		29 37
Printing,		9 28
Refunded,		1,877 62
	17,802 19	12,513 22
Balance Sept. 30, 1865,	212 50	
" " 1866,		5,501 47
	18,014 69	18,014 69

The total production or interest bearing fund belonging to the University on the 30th day of September, 1866, was as follows:

Amount due on Certificates of Sales,	$51,388 70
Amount due on Mortgages,	7,842 00
Certificates of Idebtedness,	101,000 00
Total productive fund,	$160,230 70

This sum would yield an annual income of $11,216.15 only; a sum entirely inadequate to meet the current expenses of the University. This amount of productive fund will undoubtedly be increased somewhat during the present year by payments on account of sales of University lands.

The Agricultural College Fund was, by a law of last winter, made applicable to the support of a department in the University. The productive fund so far is only..$5,080.00
Amount on hand subject to investment........................ 2,981.85

Total productive fund,..............................$8,061.85

The income of this fund subject to the use of the University was, on the 30th day of September last,........ ....$144.93

An increase in the income of this fund may reasonably be expected during the present year.

The county of Dane, under the provisions of chapter 114, Laws of 1866, issued to the state, for the purpose of purchasing a farm, bonds to the amount of $40,000, a portion of which have been sold or hypothecated for the sum of $29,358.72. Real estate has been purchased for the sum of $23,672.00, leaving a balance on hand, subject to the control of the Regents for improvements, the sum of $5,686.72.

The number of acres of University Land subject to entry at the close of fiscal year ending Sept. 30, 1866, was $17,982.05.

The above statement comprises all the facts necessary to be stated in a financial report, and is respectfully submitted.

I have the honor to be,
Your obedient servant,
THOS. S. ALLEN,
Sec'y of State and ex officio Sec'y Regents of University.

APPENDIX "B"

INVENTORY OF UNIVERSITY PROPERTY, JULY 1, 1866.

To the Regents of the University of Wisconsin:

Your committee appointed by virtue of a resolution of your board, on the 29th of June, ult., with instructions to "examine into the present condition of the property, and report in detail, as far as practicable, a full inventory of the real and personal property embraced in the effects of the University; with the appraised value of the lands, and their location, and an estimated value of the personal property and its condition," would respectfully submit the following

REPORT.

That they have compiled a list of all real estate, embracing the following:

20,672 05-100	acres	University lands	$46,308.05
240,007 73-100	"	Ag. College lands	300,009.66
40 63-100	"	University grounds at $400 per acre,	16,252.00
		University Buildings cost	104,339.47
260,720 41-100			
		Making a total of value	$466,709.18

As shown in detail by schedule marked "A," herewith accompanying, to which special reference is made.

Of the personal property your committee have prepared a schedule marked "B," classified I, II, III, &c.

Class I, embraces the funds.
" II, " " furniture.
" III, " " Philosophical Apparatus in charge of Prof. J. W. Sterling.
" IV. " " Chemical Apparatus and cabinet of specimens in Geology, Botany, Natural History, &c., in charge of Prof. E. S. Carr.

The Apparatus and Cabinet have been inventoried from lists furnished by the Professors in charge. The furniture has been appraised from actual inspection of the articles enumerated, and its condition noted.

This comprises all the effects of the University of which your committee have any knowledge, *except* the Library, which on account of the absence of the Librarian, cannot now be definitely catalogued or valued. Your committee have therefore *estimated* the number of volumes at 2600, being the number last reported, the total cost of which, as appears of record to be $2,110 00. An accurate catalogue should be furnished with the prices attached, which when appended to this report completes it.

RECAPITULATION.

	Class.	Acres. 100	Valuation.
I.	University Lands,	20.672.05	$ 46,308.05
II.	Agricultural Lands,	240,007.73	300,009.66
III.	University Grounds,	40.63	120,591.47
	Total Real Estate,		$466,909.18

PERSONAL.

I.	Funds,	$218,094.74
II.	Furniture,	2,095.25
III.	Phil. Apparatus,	1,114.35
IV.	Chem. App. and Cabinet,	16,450.00
V.	Library, (estimated)	2,110.00
	Total valuation,	$706,773.52

Repesctfully submitted at Madison, July 17, 1866.

J. HADLEY,
N. B. VAN SLYKE,
R. B. SANDERSON,
Committee.

SCHEDULE "A."

Inventory of *Real Estate*, embracing "University Lands," "Agricultural College Lands," and "University Grounds," with buildings, &c.

CLASS I.—UNIVERSITY LANDS.

County.	Acres. 100.		Price.
Calumet,,	40.00		177.60
Chippewa,	3,357.34		8,106.30
Clark,	160.00		248.99
Columbia,.	78.84		484.00
Crawford,.	313.02		972.00
*Door,.	4,037.34		8,450.36
Eau Claire,	3,206.33		7,783.47
Grant,.	40.00		52.20
Iowa,	69.57		152.00
Manitowoc,	80.00		222.06
Marathon,	800.00		1,744.00
Pepin,	651.17		2,392.30
Pierce,.	4,965.42		13,074,97
Portage,.	392.52		862.40
Rock,	small lots.		40.80
St. Croix,.,	240.00		721.60
Trempeleau,.	160.00		348.00
Winnebago,.	80.00		474.00
Total,	20,672.05	Valued at	$46,308.05

*The Door Co. lands, entry not perfected.

CLASS II.—AGRICULTURAL COLLEGE LANDS,

County.	Acres. 100.		Value.
Chippewa,	16,303.68		
Clark,	12,068.64		
Dunn,	3,200.00		
Marathon.	89,375.16		
Oconto,	28,813.98		
Polk,	57,636.03		
Shawano,	32,610.24		
Total,	240,007.73	@ $1.25	$300,009.66

CLASS III.—UNIVERSITY GROUNDS AND THREE COLLEGE BUILDINGS.

Madison, Dane Co.	40 63-100 acres, $400.00	16,252.00
	Buildings, cash,	104,339.47
	Total,	$120,591.47

SCHEDULE "B."

Inventory of Personal Property, embracing unpaid certificates for lands sold. mortgages due on loans, bonds, and cash in possession of the state, Also, personal effects in the University, consisting of furniture, apparatus, &c.

CLASS I.—TRUST FUNDS.

County.	Am't due on Certificates.	Amount due on Mortgages.
Brown,	$ 756.00	....
Calumet,	3,052.00	667.00
Chippewa,	2,556.00	....
Columbia,	304.00	....
Crawford,	760,00	....
Dane,	2,035.00	940.00
Dodge,	1,090.00	400.00
Dunn,	327.00	....
Eau Claire,	11,144.98	....
Fond du Lac,	3,664.00	500.00
Grant,	103,00	....
Green,	3,861.00	....
Iowa,	1,080.00	350.00
Jefferson,	474.00	....
Juneau,	....	300.00
La Crosse,	....	800.00
Lafayette,	1,624.00	....
Manitowoc,	884.00	600.00
Marquette,	....	200.00
Milwaukee,	....	400.00
Outagamie,	373.00	....
Ozaukee,	306.00	....
Pepin,	4,087.00	....
Pierce,	18,766.76	....
Portage,	1,844.00	300.00
Racine,	....	300.00
Richland,	2,051.00	350.00
Rock,	1,594.00	150.00
Sheboygan,	....	510.00
Walworth,	788.00	225.00
Washington,	....	150.00
Winnebago,	1,553.00	....
Total,	$65,077.74	$7,142.00

7 per cent. certificates of State indebtedness.	96,000.00
7 per cent. Bonds of Dane county, issued for experimental farm,	40,000.00
Cash in Treasurer's hands,	9,875.00
Certificates for lands, itemized above,	65,077.74
Mortgages for loans, " "	7,142.00
Total trust funds,	$218,094.74

CLASS II.—FURNITURE IN UNIVERSITY.

Classified "A" good; "B" fair; "C" bad condition:

No.	Articles.	Class.	Price.	Amount.
3	Hot air furnaces,	b	$100 00	$300 00
12	" "	c	10 00	120 00
9	Parlor stoves and pipe,	a	18 00	162 00
1	" "	a	15 00	15 00
1	" "	b	12 00	12 00
1	" "	a	10 00	10 00
2	" "	b	7 00	14 00
1	" "	b	6 00	6 00
1	" "	b	5 00	5 00
1	Box stove and pipe,	a	15 00	15 00
35	" "	a	10 00	354 00
1	" "	b	9 00	9 00
1	" "	b	8 00	8 00
66	School desks,	a	4 00	264 00
5	Chairs,	a	3 00	15 00
110	"	a	2 50	275 00
16	"	a	2 00	32 00
14	"	a	1 00	14 00
131	"	a	75	98 25
16	Settees,	a	3 00	48 00
13	"	b	2 00	26 00
5	"	a	1 00	5 00
3	"	c	50	1 50
1	Lecture desk,	a	8 00	8 00
2	"	a	10 00	20 00
1	"	a	6 00	6 00
1	"	a	5 00	5 00
2	Tables,	a	10 00	20 00
9	"	a	5 00	45 00
4	"	a	2 00	8 00
6	"	b	2 00	12 00
2	"	a	1 00	2 00
22	Window curtains, cloth,	a & b	2 00	44 00
1	Melodeon,	b	25 00	25 00
4	Cabinet cases—movable	a	15 00	60 00
1	Counter, long,	b	5 00	5 00
6	Pails,	a,b,c,	37½	2 25
2	Wash tubs,	b	1 00	2 00
15	Fire shovels and coal,	a,b,c,	50	7 50
14	Ash pails,	a & b	50	7 00
2	Wood saws,	b	50	1 00
2	Scythes,	b	50	1 00
2	Crowbars,	b	1 00	2 00
1	Axe,	b	75	75
2	Wheelbarrows,	b & c	1 50	3 00
1	Pick-axe,	b	1 00	1 00
2	Oil cans and lamps,	b	50	1 00
1	Clock,	b	2 00	2 00
	Amount of furniture,			$2,095 25

CLASS III.—PERSONAL PROPERTY IN UNIVERSITY BUILDINGS.

Apparatus in keeping of Prof. J. W. Sterling, as listed by him January, 1863.

Cohesion glass plates,	1 00
" lead "	75
Inertia apparatus	1 00
Capillary tubes with stand and pan,	1 25
" plates,	2 00
Set of (ivory) Collision balls,	7 00
Whirling machine with 8 illustrations,	8 00
Atwood's machine (Ritchie's),	75 00
Mechanical powers, full sett,	30 00
Gyroscope,	6 00
Plateaus apparatus,	6 00

HYDROSTATICS—LAWS OF MATTER AND MACHANICS.

Equilebrium tubes, set of six,	6 00
Pressure of liquids, with plate and ball,	3 00
Hydrostatic bellows,	10 00
Hero's fountain, (copper)	6 00
Archimedes' screw pump,	5 00
Tantalus cup, broken,	1 50
Glass model of diving bell,	1 50
Glass jar, 9x14 inches,	3 50
Glass jar,	2 00
Brass and glass siphon,	2 00
Wurtemberg siphon,	75
Glass plate and cord,	1 50

PNEUMATICS.

Air pump,	85 00
Double acting condenser and exhauster,	3 00
Large open top bell glass,	3 50
Cylindrical, do	4 00
Small do	2 50
Swelled hand glass,	1 00
Large bell glass with screw caps,	3 50
Tall bell glass and jar for same,	3 00
Plain bell glasses, four sizes,	4 50
Bladder cup with cap,	2 00
Freezing apparatus,	8 00
Magdeburg hemispheres,	10 00
Revolving jet and stand,	1 25
Double transferrer,	10 00
Upward pressure apparatus,	10 00
Flexible water hose,	1 00
Bolt head,	3 00
Barometer apparatus,	3 50
Fountain in vacuo,	6 00
Guinea and feather tube,	7 00
Weight and buoyancy of air,	6 50
Liquid transferrer,	3 00
Amount carried forward,	**$362 00**

Amount brought forward,	$362 00
Mercury tunnel,	1 00
Bursting squares, 3,	3 00
Wire guard for bursting squares,	75
Brass caps and valves for same—2,	50
Siphon Vac. gauge,	2 50
Water hammer,	3 00
Siphon in vacuo with bell glass, &c.,	4 00
Sliding rod and packing screw,	1 75
Air-gun barrel,	1 00
Condensing chamber, (glass)	10 00
" " (copper)	4 00
Pneumatic and Hydrostatic paradox,	1 50
Plate paradox with unica disc,	1 25
Pipe paradox with balls,	1 25
Condensation guage,	2 50
Stop cocks—large screw, (2)	1 00
" small " (2)	1 00
Connecting screw, large and small	1 00
Double interior screw coupling,	50
Guard screw, (2)	1 00
Screw plugs, (3)	1 50
Double interior coupling (2)	50
Long connecter,	50
Leather collars for stop-cocks,	50
Wood cylinder with weight,	25
Small bolt head,	25

ELECTRICITY.

Electrical plate machine,	100 00
Electric battery—6 jars,	10 00
Atmospheric Leyden jar,	3 00
Electrometer jar,	2 50
Leyden jar with movable coatings,	3 50
Diamond jar (2)	6 00
Spiral tube,	3 50
Electric spoon,	1 25
Insulated conductors, (3)	12 00
Joint discharger (2 hands),	3 50
" 1 handle (broken),	2 50
Universal discharger,	8 00
Balance Electrometer,	4 00
Electrical bells,	3 00
Leyden jar with bell (broken),	5 00
Dancing image plates,	3 00
Stand for illuminating eggs,	3 00
Pith ball electrometer,	1 00
Gold leaf electrometer,	2 00
" " with condensing plates,	5 00
Plate for pith balls,	50
Electric flier,	60
Electric seasons machine,	1 50
Sulpher cone and cup,	1 50
Insulated bar,	4 50
Insulated stool,	4 50
Revolving bell glass,	2 60
Points for luminous bells,	50
Amount carried forward,	$605 85

Amount brought forward,	$605 85
Electrical wheel and inclined plane,	4 00
Electrophorus,	6 00
Electric swing,	3 00
Ivory mortar and ball,	2 00
Powder bomb,	1 25
Electric swan,	50
Sliding directing rod,	3 00
Luminous star on glass,	4 00
Profile of Franklin,	4 00
Franklin's plate,	4 00
Thunder house,	6 00
Electric flood wheel and point,	1 50
Abbe Nollet's globe,	4 00
Model of Obelisk,	3 00
Coulombs hollow sphere,	7 00
Brass globes (4),	10 00
Condenser (2 discs),	1 50
Artificial spider,	50
Amalgam,	50
Head of hair,	1 00
Pith balls (3 dozen)	1 00
Groves battery—2 cups,	4 00
Wax cylinder,	1 00
Sulpher "	2 00
Glass "	3 00
MAGNETISM.	
U Magnet,	1 50
" compound,	3 00
Bar magnet,	1 00
" compound,	2 50
Magnetic needle,	1 50
Astatic "	1 50
Dipping "	1 50
Armatures " (3)	1 50
OPTICS.	
Prism flint glass,	50
" flint and crown mounted	7 50
Multiplying glass,	50
Six lenses,	4 00
Models of human eye,	12 00
Mirrors, convex and concave,	2 00
Stereoscope with views,	20 00
Tourmaline Polariscope,	5 00
Sylenite objects,	6 00
Plate and press for rings,	1 50
Opera glass,	15 00
Microscope,	100 00
" small,	3 50
SURVEYING.	
Surveyors transit,	75 00
Levelling rod,	5 00
Surveyors' compass,	40 00
2 do chains and pins,	10 00
Drawing instruments—12 sets,	20 00
Surveyors' tape line,	5 50
Amount carried forward,	$1,030 60

Amount brought forward,	$1,030 60
Terrestrial globe	25 00
Celestial,	25 00
Orrery,	7 00
Astronomical chart,	5 00
Drawings steam engine,	10 00
Eolipile,	1 50
Wollaston's illustrations—low pressure steam engine,	3 00
Circular glass plate,	2 25
Iron screw press,	5 00
Amount Philosophical apparatus,	$1,114 35

"B."—CLASS IV.—APPARATUS AND CABINET

In charge of Prof. E. S. Carr—Department of Chemistry and Natural History:

No.	Arranged Specimens.
6,450	Minerals, rocks, fossils and ores.
50	Corals and other radiata.
2,000	Marine and fresh water shells.
11	Fishes.
54	Reptiles.
65	Quadrupeds.
382	Birds.
50	Miscellaneous.
3,000	Herbarium of 50 folio volumes.
50	Curiosities.
75	Of seeds and woods.
12,137	specimens, valued at $15,000

CHEMICAL APPARATUS—PRINCIPAL PIECES.

Oxyhydrogen blow-pipe	40
For condensing carbonic acid gas	25
Balance	70
Microscope	100
Furnace	15
Galvanic battery	25
Electro-magnetic apparatus, 15 pieces,	100
For heat and radiation	25
General assortment of retorts, receivers, test tubes, test glasses, bottles, crucibles and chemicals, &c., &c., estimated to be worth	800
30 large canvass illustrations of geology and palentology	250
Total value	$16,450

In addition to the above there are unarranged about 2,000 duplicate specimens of plants and about 4,500 specimens of rocks, minerals and fossils, valuable for making exchanges. There is also in the hands of the director of the Geological Survey, (Prof. Hall,) a collection of fossils made during the progress of the survey, and *which the law requires to be deposited in the University.* This collection, illustrating the palentology of our own State, would greatly add to the value of the present collection. With the exception of that of the University of Michigan, it is the most valuable collection in the northwest.

CLASS V.—LIBRARY.

Estimated, in the absence of any catalogue at 2,600 volumes, and cost $2,110—see remarks, page 2 of this report.

ANNUAL REPORT

OF THE

BOARD OF REGENTS

OF THE

UNIVERSITY OF WISCONSIN,

FOR THE

FISCAL YEAR ENDING SEPTEMBER 30, 1869.

BOARD OF REGENTS.

Terms expire first Monday in February, 1870.

H. D. BARRON	ST. CROIX FALLS
R. B. SANDERSON	POYNETTE.
F. O. THORPE	WEST BEND.
JOHN G. McMYNN	RACINE.
J. C. COVER	LANCASTER.

Terms expire first Monday in February, 1871.

H. H. GRAY	DARLINGTON.
AUG. L. SMITH	APPLETON.
B. R. HINCKLEY	OCONOMOWOC.
SAM'L FALLOWS	MILWAUKEE.
JACOB S. BUGH	WAUTOMA.

Terms expire first Monday in February, 1872.

ANTHONY VAN WYCK	KENOSHA.
ANGUS CAMERON	LA CROSSE.
C. S. HAMILTON	FOND DU LAC.
J. C. GREGORY	MADISON.
N. B. VAN SLYKE	MADISON.

OFFICERS.

C. S. HAMILTON,

PRESIDENT.

N. B. Van Slyke, R. B. Sanderson, J. C, Gregory,

EXECUTIVE COMMITTEE.

JOHN S. DEAN,

SECRETARY.

WM. E. SMITH, ***State Treasurer,***

EX-OFFICIO TREASURER.

ANNUAL REPORT.

To His Excellency, Lucius Fairchild,

Governor of the State of Wisconsin:

In compliance with the requirements of section 12 of the law of 1866, re-organizing the University, I have the honor to submit herewith the report of the Board of Regents on the condition and progress of the University during the past collegiate and fiscal year, ending Sept. 30, 1869.

The Faculty and Instructors are as follows:

Hon. P. A. CHADBOURNE, M. D., LL.D.,
President and Professor of Mental and Moral Philosophy.

JOHN W. STERLING, LL.D.,
Vice President and Professor of Natural Philosophy and Astronomy.

JOHN B. PARKINSON, A. M.,
Professor of Mathematics.

STEPHEN H. CARPENTER, A. M.,
Professor of Rhetoric and English Literature.

WILLIAM F. ALLEN, A. M.,
Professor of Ancient Languages and History.

JOHN B. FEULING, Ph. D.,
Professor of Modern Languages and Comparative Philology.

W. W. DANIELLS, M. S.,
Professor of Agriculture and Analytical Chemistry.

JOHN E. DAVIES, M. D.,
Professor of Natural History and Chemistry.

ADDISON E. VERRILL, A. M.,
Professor of Comparative Anatomy and Entomology.

Hon. L. S. DIXON, LL.D.,
Chief Justice of the Supreme Court of Wisconsin,
Professor of Law.

Hon. ORSAMUS COLE, LL.D.,
Associate Justice of the Supreme Court of Wisconsin,
Professor of Law.

Hon. BYRON PAINE, LL.D ,
Associate Justice of the Supreme Court of Wisconsin,
Professor of Law.

Hon. H. S. ORTON,
Dean of Law Faculty.

J. H. CARPENTER, Esq.,
Professor of Law.

WM. F. VILAS, LL.B.,
Professor of Law.

D. B. FRANKENBURGER, Ph. B.,
Instructor in Preparatory Department.

R. B. ANDERSON, Ph. B.,
Instructor in Languages.

Miss CLARISSA L. WARE,
Preceptress of Female College.

Miss CLARA D. BEWICK, Ph. B.,
Teacher of Latin and History.

Miss LIZZIE S. SPENCER, Ph. B.,
Teacher of English Branches.

Miss FRANCES BROWN,
Teacher of Music.

Miss LOUISA BREWSTER,
Teacher of Drawing and Painting.

I. THE COLLEGE OF ARTS.

Candidates for admission to the College of Arts are examined in English Grammar, Geography, Mental and Written Arithmetic, and in Algebra to Quadratic Equations; and must be at least fifteen years of age.

Candidates for advanced standing must, in addition to the studies named above, pass examination in those previously pursued by the class which they propose to enter, or in studies equivalent to them.

The following is the course of instruction in this department:

FRESHMAN YEAR.

FIRST TERM.

Mathematics	Elementary Algebra.
Language	Sentential Analysis.
History	United States.
Lectures	Health and Methods of Study.
Elective	French, Latin, Greek and Scandinavian Languages.

SECOND TERM.

Mathematics	Elementary Algebra completed. Plane Geometry.
Language	Analysis and Composition.
Geography	Physical.
Natural History	Lectures.
Elective	French, Latin, Greek and Scandinavian Languages. Book Keeping.

THIRD TERM.

Mathematics	Solid Geometry.
Language	Craiks' English of Skakespeare.
Science	Elements of Natural Philosophy. Physiology.
Elective	French, Latin, Greek and Scandinavian Languages.

Themes and Declamations weekly during the year.

SOPHOMORE YEAR.

FIRST TERM.

Mathematics	Higher Algebra—Loomis.
German	Otto's Conversation Grammar.
Natural History	Botany,
History	Roman Empire.
Elective Studies	Practical Botany and Agriculture, French and Latin.

SECOND TERM.

Mathematics	Algebra completed—Loomis. Conic Sections "
German	Otto's Conversation Grammar.
History	Mediæval—Student's France.
Elective Studies	History of Useful Plants, Physical Geography, Climatology, French and Latin.

THIRD TERM.

Mathematics	Plane Trigonometry, Mensuration, Surveying and Navigation—Loomis.
German	Select Prose and Poetry.

JUNIOR YEAR.

FIRST TERM.

Mathematics	Spherical Trigonometry—Loomis. Analytical Geometry—Loomis.
Rhetoric	Day's Art of Discourse.
Chemistry	Youmans.
Natural History	Mineralogy—Dana.
Human Anatomy	Lectures.
Elective Studies	Laboratory Practice, *Qualitative Analysis*, *Blowpipe Analysis.*

SECOND TERM.

Physics	Snell's Olmsted begun—Lectures.
Civil Polity	Political Economy—Perry.
Chemistry	Organic and applied.
Natural History	Zoology begun—Agassiz.
Elective Studies	Differential and Integral Calculus, Laboratory Practice, *Quantitative Analysis.*

THIRD TERM.

Physics	Snell's Olmsted completed—Lectures.
Civil Polity	International Law, Constitution of the United States.
Natural History	Zoology completed. General Physiology.
History	England—Student's Hume.
Elective Studies	Natural History of Domestic Animals, Entomology.

Themes and Declamations weekly during the year.

SENIOR YEAR.

FIRST TERM.

Astronomy	Snell's Olmsted, and Lectures.
Mental Philosophy.	Haven, and Lectures.
English Literature.	Shaw.
Aesthetics	Bascom.
Elective Studies	Examination of Soils—Forestry.

SECOND TERM.

Rhetoric	Bascom,
Logic	Whateley.
Moral Philosophy.	Hopkins, and Lectures.
English Literature.	Lectures.
Natural History	Geology and Mining.
Elective Studies	Modern Languages, Chemical Analysis, Determinative Mineralogy.

THIRD TERM.

Natural Theology	Chadbourne.
Evidences	Lectures.
History	Guizot's History of Civilization. General Review.
Elective Studies	Reviews.

Critical Essays, Declamations, and Forensic Disputations, weekly during the year.

This College was organized especially to meet the requirements of Congress in granting the appropriation of land for industrial schools. Its object is to provide not only for a general scientific education, but also for such a range of studies in the application of science as to meet the wants of those who desire to fit themselves for agricultural, mechanical, commercial, or strictly scientific pursuits. One hundred students are now in its regular classes, and nearly all of the University students should be reckoned as belonging to this college, making an aggregate of one hundred and fifty, exclusive of the preparatory classes. The departments of Agriculture and Engineering are both branches of this college.

The whole income from the congressional grant has, up to this time, amounted to less than $6,000; of this income only $2,333.05 has been expended. The Experimental Farm was the generous gift of the people of Dane county. The farm buildings were erected and other permanent improvements made with the balance of the Dane county grant not expended in the purchase of the land. But means for the working of the farm, the fitting up and supplying the Analytical Laboratory and other scientific appliances, as well as all expense for instruction, have been supplied entirely from the University funds, excepting the small sum mentioned above. Iowa has a yearly income of over $30,000 for her Agricultural College; Michigan secures to her college a sum nearly as large. We have had from the Congressional grant, for three years, an average income of less than $2,000 annually, with which nothing could have been done without the aid of the University.

For an account of the farm, the experiments, and the general condition of the Department of Agriculture, I beg leave to refer to the report of Professor W. W. Daniells, hereto annexed.

It is gratifying to be able to state that the number of students pursuing special scientific studies pertaining to industrial pursuits is constantly increasing, and much of the work done by them is of a high order. The committee appointed by the Regents to conduct the examination the present year, use the following language in reference to the classes in science:

"The examiners take pleasure in mentioning in particular the proficiency attained by classes in the natural sciences. There was shown a thoroughness of knowledge and breadth of attainment that placed them abreast of classes instructed in the older scientific schools of our land. It is with not a little pride that we accept as a fact the advance of the institution into the front rank in this department of instruction."

In these special departments, the labor of instructing becomes very great, as little can be done for the students in classes. Thus for we have been able to meet all demands made upon the University for instruction, and it is confidently hoped that funds will be secured from sale of lands to provide for new departments as they are needed.

COURSE OF STUDY IN THE DEPARTMENT OF AGRICULTURE.

FIRST YEAR.

First Term.

Botany.—Structural Botany, including microscopic examination of tissues and other minute structures. Physiological Botany, including the germination and growth of plants. Systematic Botany, or classification of plants, including a discussion of the general principles of classification in the different departments of Natural History. The limitations of species and origin of varieties with exercises in Botanical analysis.

Second Term.

Practical Agriculture.—Location of farm. Division into fields. Arrangement and planning of farm buildings. Farm implements. General principles of tillage. Principles of Drainage. Laying out and construction of drains. Methods of seeding. Harvesting of crops.

Physical Geography and Climatology.—Dews, Frosts, Fogs, Clouds, Rain, Hail, Snow, Winds and local causes affecting climate, as proximity to mountain chains, to forests, or to bodies of water. Effect produced by the removal of forests, or by planting screens of timber. Meteorological instruments, their methods of use and advantages to the agriculturist.

Third Term.

Practical Botany.—Botanical characteristics and geographical distribution of the natural orders, with their relative importance. The genera and species having agricultural value, those having commercial or medical value, those having ornamental value, and those which are noxious or detrimental—as weeds or poisonous plants.

Horticulture.—Hot beds, their construction and use. Methods of propagation of plants, by layers, by cuttings, by budding, by grafting, &c. Transplanting. Varieties of small fruits, and the best means of cultivating them. General management of nurseries. Production of new varieties. Landscape gardening.

SECOND YEAR.

First Term.

Chemistry.—The Forces, Heat, Light, Electricity and Magnetism. Chemical affinity and the laws of chemical combination. The Elements, their history, properties, combinations and uses. Applications of Chemistry to the arts and manufactures. Laboratory practice will be begun as soon as the student has become sufficiently advanced, taking up the special reactions of the elements, and the laws of chemical decomposition and precipitation.

Second Term.

Zoology.—Principles of classification. Descriptive Zoology, comprising the systematic arrangement of animals in accordance with their natural affinities, into classes, orders, families, &c. Natural history of domestic animals.

Organic Chemistry.—Composition of organic bodies and their special characteristics. Chemistry of germination, of nutrition, of vegetable growth, of decomposition, of fermentation, of saponification.

Analytical Chemistry.—Including general analysis, analysis of Minerals, Blowpipe analysis, analysis of soils, manures and ashes of plants. Volumetric analysis and its applications to acidimetry and alkalimetry.

Third Term.

Practical Agriculture.—General principles of farm economy. Care and feeding of Stock. Manures, animal, vegetable and mineral, their management and mode of application. Preparation of the soil for particular crops. Cultivation of crops. Management of grass lands. Improvement of soils by physical means, as draining, subsoiling, &c. Conducting experiments. Industrial Statistics.

Zoology.—General Physiology, Comparative Anatomy, and Embryology. Entomology, including classification of insects. Habits of noxious species and best means of checking their ravages. Habits of beneficial species.

THIRD YEAR.

First Term.

Forestry.—Planting and management of Forest Trees. Soils adapted to their growth. Value of different kinds of trees for fuel, building and other purposes.

Geology.—Dynamical and descriptive. Origin of soils. Building Materials. Coal and Metals.

Second Term.

Agricultural Chemistry.—Composition of soils. The relations of air and moisture to vegetable growth. Connection of light, heat and electricity with growth of plants. Chemical changes attending vegetable growth. Chemistry of the various processes of the farm, as plowing, fallowing, draining, &c. Preparation, preservation and composting of manures. Artificial manures. Methods of improving soils by chemical means, by mineral manures, by vegetable manures, by animal manures. Chemical composition of the various crops. Chemistry of the dairy.

Third Term.

Animal Husbandry.—Breeds of domestic animals, their characteristics and adaptation to particular purposes. Principles of stock breeding. Veterinary surgery and medicine.

History of Agricultural Education.

It will be noticed that the same branch sometimes occurs in different parts of the course. In some cases this has been found necessary in properly arranging the studies into terms. In other cases this necessity arises from the different methods in which the same subject will be discussed; these methods belonging to different departments of instruction, some of them adapted to students in the earlier, and others to those in the later part of the course.

DEPARTMENT OF ENGINEERING AND MILITARY TACTICS.

The following military exercises and course of study have been adopted :

MILITARY EXERCISES.

1. There shall be a drill in some one of the different arms of the service, at least three times each week, when the weather permits.

II. *Drills.* The drills shall comprise practical instruction in the schools of the Soldier, Company and Battalion, Field Artillery and Dismounted Cavalry.

III. *Dress Parades.* There shall be an evening Dress Parade of the Battalion at such times as may be deemed necessary for instruction and exercise.

IV. *Undress Parades.* Parades, without arms, shall be made at such times as may be found necessary.

V. *Guard Mounting.* The ceremony of mounting and turning off guards will occur as often as may be deemed necessary for instruction. Students will be instructed in the duties of Officer of the Day, Officer of the Guard and Sentinel.

VI. Practical instruction in the Field, in laying out and constructing field fortifications and other military works, will be given the class pursuing the study of Military engineering.

COURSE OF STUDY AND MILITARY EXERCISES.

I. The Course of Study will comprise Civil and Military Engineering, Infantry, Cavalry, Field, Garrison and Siege Artillery Tactics, Advanced Guard and Outpost, &c., Ordnance and Gunnery, Military Law and Practice of Courts Martial and Army regulations.

II.—*Seniors.*

First Term.

Civil and Military Engineering, Practical Instruction in the Schools of the Soldier, Company and Battalion, and Field Artillery.

Second Term.

Civil and Military Engineering.

Third Term.

Civil and Military Engineering, Review of Studies of preceding terms.

Practical instruction in the Schools of the Soldier, Company and Battalion and Dismounted Cavalry.

III.—*Juniors.*

First Term.

Infantry Tactics.

Practical instruction in the Schools of the Soldier, Company and Battalion, and Field Artillery.

Second Term.

Cavalry, Field, Garrison and Siege Artillery Tactics, Ordnance and Gunnery.

Practical instruction in the School of the Soldier.

Third Term.

Military Law and Practice of Courts Martial and Army Regulations.

Practical instruction in the Schools of the Soldier, Company, Battalion and Dismounted Cavalry.

IV.—*Sophomores.*

First Term.

Practical instruction in the Schools of the Soldier, Company, and Battalion.

Second Term.

Practical instruction in the School of the Soldier.

Third Term.

Practical instruction in the Schools of the Soldier, Company and Battalion, and Dismounted Cavalry.

V.—*Freshmen.*

First Term.

Practical instruction in the Schools of the Soldier, Company and Battalion.

Second Term.

Practical instruction in the School of the Soldier.

Third Term.

Practical instruction in the Schools of the Soldier, Company and Battalion.

Col. Pease having been relieved from duty here, the Regents have as yet been unable to secure a successor. But all students in the University who desire instruction in military tactics have been well provided for by the employment of Mr. D. B. Frankenburger as Drill Master.

II. THE COLLEGE OF LETTERS.

Candidates for admission to the Freshman Class are examined in Geography, Arithmetic and Algebra to Quadratic Equations; in English, Latin and Greek Grammar; in Cæsar, Virgil, Cicero's Orations and in three books of Xenophon's Anabasis; and must be at least fifteen years of age.

Candidates for advanced standing must, in addition to the studies named above, pass examination in those previously pursued by the class which they propose to enter, or in those equivalent to them.

The following is the course of instruction in this Department, which is intended to be equal to that of the best colleges, where Ancient Languages are made an essential part of the course:

FRESHMAN CLASS.

FIRST TERM.

Latin	Livy—Lincoln.
Greek	Xenophon's Anabasis—Boise.
History	United States—Eliot.
Lectures	Laws of Health and Methods of study.
Elective	French.

SECOND TERM.

Mathematics	Geometry
Latin	Cicero de Senectute and de Amicitia.
Greek	Xenophon's Memorabilia—Robbins.
History	Greece—Smith.
Elective	French.

THIRD TERM.

Mathematics	Geometry, completed.
Latin	Horace—Odes.
Greek	Memorabilia, continued.
Antiquities	Greek and Roman.
History	Rome—Liddell or Smith.

Elective	French.

Themes and Declamations during the year. Latin and Greek Composition through the year.

SOPHOMORE YEAR.

FIRST TERM.

Mathematics	Higher Algebra—Loomis.
Latin	Horace—Satires and Epistles.
Greek	Homer—Iliad.
German	Otto's Conversation Grammar.
Natural History	Botany.
History	Roman Empire—Lectures

SECOND TERM.

Mathematics	Algebra, completed—Loomis. Conic Sections.
Latin	Histories of Tacitus—Tyler.
Greek	Æschylus Prometheus—Woolsey.
German	Otto's Conversation Grammar.
History	Mediæval—Student's France.

THIRD TERM.

Mathematics	Plane Trigonometry, Mensuration, Surveying and Navigation—Loomis.
Latin	Captives of Plautus—Proudfit.
Greek	Demosthenes—Olynthiacs and Philippics—Champlin.
German	Select Prose and Poetry.
Natural History	Botanical Analysis—Gray's Manual.
History	Modern—Student's France.

Themes and Declamations weekly during the year. Latin composition through the year.

JUNIOR YEAR.

FIRST TERM.

Rhetoric	Day's Art of Discourse.
Mathematics	Spherical Trigonometry—Loomis. Analytical Geometry.
Chemistry	Youman's and Lectures.
Natural History ..	Mineralogy—Dana.
Human Anatomy ..	Lectures.

SECOND TERM.

Physics	Snell's Olmsted begun—Lectures.
Civil Polity	Political Economy—Perry.
Chemistry	Organic and applied.
Natural History ...	Zoology begun—Agassiz.
History	England—Students' Hume.
Elective	Calculus.

THIRD TERM.

Physics	Snell's Olmsted, completed, with Lectures.
Civil Polity	International Law, Constitution of the United States.
Natural History ..	Zoology completed. General Physiology.

Themes and Declamations weekly during the year.

SENIOR YEAR.

FIRST TERM.

Astronomy	Snell's Olmsted, and Lectures.
Mental Philosophy	Haven, and Lectures.
English Literature.	Shaw.
Aesthetics	Bascom.

SECOND TERM.

Rhetoric	Bascom.
Logic	Whateley.
Moral Philosophy.	Hopkins, and Lectures.
English Literature.	Lectures.
Natural History...	Geology and Mining.

THIRD TERM.

Natural Theology .	Chadbourne.
Evidences	Lectures.
History	Guizot's History of Civilization.
	General Review.

Critical Essays, Declamations, and Disputations weekly during the year.

III. PROFESSIONAL AND OTHER COLLEGES.

THE LAW DEPARTMENT.

Students are admitted at any time; but those who are not Collegiate graduates must be twenty years of age to enter this Department.

The following is the prescribed course of study:

FIRST TERM.

Judge Orton	Personal Property. Partnership. Corporations. Contract of Sale.
Prof. Carpenter. .	Criminal Law.
Judge Cole.	Domestic Relations.
Prof. Vilas	The Constitution and Jurisdiction of Courts. Common Law Pleadings.

SECOND TERM.

Judge Orton	The Law Merchant, covering negotiable paper, suretyship and guaranty. Insurance. Fixtures.
Prof. Carpenter. .	Contracts.
Judge Paine.	Practice.
Prof. Vilas	Equity Pleading, Pleading under the Code.

THIRD TERM.

Judge Orton	The Law of Real Estate, Uses, Trusts, Powers and Wills.

Assisted by a Member of the Dane County Bar on the Law of Taxes and Tax Titles.

Prof. Carpenter. .	Bailment and Agency.
Judge Dixon.	Equity Jurisprudence.
Prof. Vilas.	Law of Evidence.

Twelve students graduated in the first class. With such instruction as is now given, the young men of the Northwest can find no better facilities for fitting themselves for the profession of law. At the same time the school will give strength to the University, by rapidly increasing the number of its active and influential Alumni.

THE FEMALE COLLEGE.

Young Ladies desiring to enter upon the first year's course of instruction must pass a satisfactory examination in the Outlines of Geography, Elements of English Grammar, and in Arithmetic to Proportion.

Those applying for advanced standing must pass examination in all the studies to which the class which they propose to enter have attended, or others equivalent to them.

Ladies may be admitted to this department and allowed to select any three studies of the term which they are qualified to pursue.

The following is the course of study:

FIRST YEAR.

First Term.

Mathematics	Higher Arithmetic.
English Language	Verbal and Sentential Analysis.
Geography	Descriptive, Map Drawing.
	General Exercises.

Second Term.

Mathematics	Arithmetic, completed.
English Language	Analysis and Composition.
Geography	Descriptive, Map Drawing.
	General Exercises.

Third Term.

Mathematics	Elementary Algebra.
Geography	Physical.
History	United States.
	General Exercises.
Reviews	Studies of the year.

SECOND YEAR.

First Term.

Mathematics...... Elementary Algebra, completed.
Language.......... Craik's English of Shakspeare.
Science.......... Botany.
History.......... Ancient.

Elective.......... French, Latin.

Second Term.

Mathematics..... Plane Geometry.
Science.......... Physiology.
History.......... Mediæval.
General Exercises.

Elective.......... French, Latin.

Third Term.

Mathematics..... Solid Geometry.
English Language. Rhetoric.
Natural Science... Botanical Analysis.
History........... Modern.
Reviews.......... Studies of the year.

Elective.......... French, Latin.

THIRD YEAR.

First Term.

Mathematics... Higher Algebra.
English Language. Criticism and Literature.
Natural Science... Zoology.
General Exercises.

Elective.......... Latin, German.

Second Term.

Mathematics...... Higher Algebra completed.
English Language. Literature.
History of English Literature—Lectures.
Polity.......... Constitution and Science of Government.
Political Economy.

Elective.......... Latin, German.

Third Term.

Philosophy	Natural.
Philosophy	Mental.
Mathematics	Plane Trigonometry.
Reviews	Studies of the year.

Elective.......... Latin, German.

FOURTH YEAR.

First Term.

Mathematics	Spherical Trigonometry.
Natural Science	Chemistry.
Philosophy	Moral.

Second Term.

Natural Science	Astronomy. Geology.
Philosophy	Moral.
History	Civilization—Guizot.

Third Term.

Aesthetics	Bascom.
Natural Theology	Chadbourne.
Evidences	Lectures. Essays and Reviews.

Elective.—Ancient and Modern Languages throughout the year.

In addition to the prescribed course in this College, young ladies are instructed in any study taught in the College of Letters or Arts, for which they are prepared. They may also attend all University lectures. Instruction in this department is given by the President and Professors of the University as their services are required. Ladies receive the same degrees as gentlemen for the same or equivalent courses of study.

POST GRADUATE COURSE.

The object of this course is to secure a higher grade of scholarship in Literature and Science than it seems possible to attain in the present state of our colleges, under the ordinary class system.

Bachelors of Art, Science and Philosophy will be admitted to this course as candidates for the degree of Doctor of Philosophy. They must devote two years to study under the direction of the President and Faculty, and pass a satisfactory examination before the Board of Examiners appointed by the Regents.

The studies are optional; but they must be selected from at least two sections, and the studies in some one section must be continued during the whole course.

Students who have pursued this course for one year, on satisfactory examination, are entitled to the Master's Degree.

SECTION I. NATURAL HISTORY.
- Botany.
- Mineralogy.
- Geology.
- Mining.

II. CHEMISTRY.
- Chemical Philosophy and Physics.
- Qualitative and Quantitative Analysis.
- Applied Chemistry.

III. MATHEMATICS AND PHYSICS.
- Pure Mathematics.
- Mechanics and Physics.
- Astronomy.
- Engineering.

IV. PHILOSOPHY AND HISTORY.
- History and International Law.
- Psychology and History of Philosophy.
- History and Criticism of Eng. Literature.

V. PHILOLOGY.
- Latin and Greek Languages and Literatures.
- Comparative Philology.
- Modern European Languages.

Some young men who have graduated are able to pursue certain studies in this course, and at the same time to render such services as instructors as to pay their expenses. These young men can secure in this way a rank in scholarship and an experience in instruction and government that will qualify them for high positions as professors and teachers.

PREPARATORY DEPARTMENT.

The object of this department is to fit young men for entering either the College of Arts or the College of Letters. Each member of the Faculty has a general direction of the studies pertaining to his department, and renders such assistance as may be required. Those who enter this department are subject to the same rules, and allowed the same privileges as College Students.

The Course of Study is now reduced to one year. The optional courses in Latin and Greek, however, offer ample opportunities for those who desire to prepare for the College of Letters.

It is expected that the time will soon come when this Department can be abolished. But for the present it seems to be essential to the welfare of the University, not only in securing numbers for the higher classes, but also a grade of scholarship essential to the best interests of the institution.

It is the aim of the University to meet the educational wants of every student in the State. The courses of study as laid down are intended to be the mere outlines of work. In the optional studies and post-graduate course there is provision for all the demands of higher scholarship which are now made upon the Institution.

By vote of the Regents, the Faculty may excuse a student from any study in either course and substitute for it any other of equal educational value, such action of the Faculty being a matter of record.

LECTURES.

Lectures are given in connection with the recitations, and some subjects are taught entirely by lectures, the students being required to take notes, and to recite upon the lectures, as when a text-book is used.

The following are the regular courses of Lectures:

To the SENIOR CLASS on Mental and Moral Philosophy, by the President; on Geology and Mining by Prof. Davies; on Rhetoric and Evidences, by Prof. Carpenter, and on Astronomy, by Prof. Sterling.

To the JUNIOR CLASS, on Chemistry, Mineralogy and Physiology, by Prof. Davies; on Comparative Zoology, by Prof. Verrill; on History and Civil Polity, by Prof. Allen; on Mechanics and Physics, by Prof. Sterling, and on Rhetoric and English Literature, by Prof. Carpenter.

To the SOPHOMORE CLASS, on Structural and Systematic Botany, by the President; on Practical Botany and Agriculture, by Prof. Daniells, and on History by Prof. Allen.

To the FRESHMAN CLASS, on the Laws of Health and Methods of Study, by the President; on History, by Prof. Allen; and on Natural History in its relations to the Arts, by the President and Prof. Davies.

To ALL THE CLASSES, on Philology by Prof. Feuling.

To SPECIAL STUDENTS on Analytical Chemistry, by Prof. Daniells.

PROGRESS AND WANTS OF THE UNIVERSITY.

In order that the progress of the University since its reorganization may be distinctly seen, I append here a statement of the attendance of students during the Fall terms of each year, as also the aggregate attendance during the same years, to-wit:

Number of students fall term 1866	179
1867	236
1868	318
1869	370
Aggregate number of students 1866-7	304
1867-8	394
1868-9	495

The aggregate for 1869-70 will be much larger than ever before.

The difference in the attendance at the Fall terms, and the total attendance for the year, arises mainly from the fact that a large number of students are not able pecuniarily to attend the whole year. Some portion of the year must be devoted to earning the means of attendance, and thus, with many, it requires a course of five or more years, in place of four, to reach the graduating standard.

It will be seen from the foregoing table that the University has steadily grown in usefulness, until now it is attracting attention from other states than our own, and has taken a high stand among the educational institutions of the country.

With increased accommodations that will attract students by reason of moderate expenses and other aids to college education, the University will continue to grow until it shall stand alongside the greatest and best of American colleges.

While the Regents have received this growth in prosperity with feelings of the utmost pride and pleasure, and have labored with singular unanimity to this end, they yet feel that it is almost entirely due to the energy and wisdom of President Chadbourne, and the zealous co-operation of the College Faculty.

I do not think that in any College of the land there can be found a more devoted body of teachers. Their labors, from the President down, have been incessant, and far beyond the measure of labor ordinarily allotted to instructors in other institutions.

But I now beg your attention to this fact, to wit: *That with the present buildings and accommodations, the University has reached the verge of its usefulness.*

To make this apparent, I will state our immediate necessities.

First—A FEMALE COLLEGE.—At the date of writing this report, there are in attendance at the University 245 young men, while the total number that can be accommodated in the College buildings is 90, and that only by putting, in some cases, four men in the same room. It is true a portion of these young men are in the Preparatory Department, but nearly 200 of this number would be entitled to rooms were that department abolished; and they are a class of young men who are in a large measure educating themselves, and who as a rule make the best scholars. They seek education for its own sake, and they are the men who leave behind them in the College an example of energy, and who, as they go forth into the world, are those from whom are drawn the men of mark and distinction. It is to such young men that we ought to extend every aid to college education.

The great items of expense in College life, are board and room-rent. The University ought to be able to furnish the room rent at very low rates, and in such manner as to enable the students to live by themselves, or at commons. If we could do this, our young men would not be driven to looking through the city for boarding places. Madison is not proverbially a cheap place in which to live, and there, as elsewhere, the price is according to the demand.

As the number of students increases, so does the cost of weekly board, until many of the best young men have either to shorten their stay at college, or find cheaper colleges.

We need for the young men every particle of the room occupied by the young ladies, and to this end, we are in immediate want of a building to be used as a Female College.

The subject of educating young men and young women together, has been urged upon the consideration of the Regents, but I do not deem it necessary now to say more on that topic than this, that this building is needed whatever system is adopted, and that some of the classes are now so large that they have to be divided for recitation, and others ought to be divided; and that with the future growth of the University, as it has grown in the past, all regular classes in both Colleges will ere long have to be divided into sections for recitation.

This want of room for young men is keeping away from us many who would be glad to come, and the result must continue to injure us until we can provide for them. The room in the University Hall, now occupied exclusively by the young ladies, is greatly needed for a lecture room. It is the only room in the University, except the chapel, large enough to accommodate some of the classes for lectures, if the young ladies attend as they now do.

Second.—We need a PUBLIC HALL for the use of the College Societies, for declamation and for chapel exercises. There is not in any of our present buildings a room large enough to accommodate the young men of the University. Rooms for public meetings of the College Societies we have not, and the young men are driven into town to hold their meetings. All this is wrong, and works as a draw back to the University, and will do so until remedied.

Third—WE NEED AN OBSERVATORY.—With the munificent grant of lands by Congress for the purposes of an University, it was the design to have a school where education in literature and practical science might be had by all who desired it; but even to this day, the University of a great State, with a million of people, has not the instruments for teaching practical astronomy, nor the means of buying them. We have not even a transit instrument for the determination of local time, and in all the State there is not a good telescope.

The grounds of the University furnish a site for an observatory equal to any in the United States. Without this indispensable aid in teaching astronomy, our institution is hardly worthy to be called a University.

If there is any legacy which a properous people ought to leave to posterity, it is to place within the reach of our sons and daughters the means of education in its highest and most beneficent forms. An appropriation which shall not exceed in amount a per capita assessment of ten cents, will place our University in the van of all colleges west of the great lakes. With such aid from the State as our immediate wants require, with a location of unsurpassed beauty and salubrity, with a President whose practical wisdom and every energy is in the interest of the students, and with an able faculty, complete in identity with the reputation of the school, there shall result an institution to which future statesmen and patriots shall turn with reverence as the Alma Mater where they were taught all that is good and noble for which man can strive.

Much has been done, and is still doing in other State schools to place the means of good, though limited, education within the reach of all. Our normal schools are sending out teachers, and our high schools, though limited in number and influence, are doing something each year as preparatory schools. All these are productive of great good, but to make the system complete, they should culminate in that higher standard which can only be reached by an University education. This is no fanciful theory—it is what every practical man can plainly see will result in the greatest possible good to the coming generations of our noble State.

WHAT THE STATE HAS DONE.

It seems appropriate here to call attention to what the state has done in support of its university, and to compare it with what has been and is being done by our sister state ot Michigan.

The grants of land for university purposes to each of these states were equal. In Michigan, the legislature, as a *first step*, advanced to its university the sum of $100,000 for buildings, which has since become *a gift*. In addition to this sum, that state gives annually, from its treasury, the sum of $15,000, to be added to the large income of its university fund. At the same time it has been giving $20,000 yearly for the running expenses of its Agricultural College, besides other liberal appropriations. The legislature, at its last session, gave to this college $70,000 for two years expenses and to erect a building. Under the liberal encouragement of the state, an institution has grown up at Ann Arbor, which in some respects is at the head of all colleges in the country, and is a just source of pride, not only to the citizens of the state, but of the country.

In comparison with this, let us see what our own state has done, or rather has *not* done for its own university.

Section 6. of article 10, of our state constitution, ordains as follows:

> " The proceeds of all lands that have been or hereafter may be granted by the United States to the state for the support of a university, shall be and remain a perpetual fund, to be called the 'university fund,' the interest of which shall be appropriated to the *support* of the State University."

It is clear that the framers of our State constitution held it to be the duty of the State to provide not only a site but buildings for a University; but in direct violation of the above constitutional provision, the legislatures of 1857, '59 and '61, took from the University fund a sum exceeding $100,000, and erected therewith the present College buildings.

The University has also been charged by the State for the management of its funds, an aggregate sum of $11,909 83, which has been taken from its funds and paid into the treasury of the State.

For two years past the State has paid annually to the University the sum of $7,303 76, as interest on the money taken ten years ago for erecting the buildings, making altogether $14,607 52.

The difference between this last sum and the amount paid to the State for clerk hire is $2,697 69, and *is the total amount that the State has ever given to the University.*

It is almost a matter of wonder that, under this illiberality on the part of the state towards its chief educational institution, that we have even a creditable university in existence; and if to-day we have such an institution, what may it not become in a few years under such fostering care as other states show to their universities?

CONCLUSION.

The following estimate, in the order of our necessities, is submitted:

For Female College building	$50,000
For public hall and chapel	15,000
For observatory and apparatus	25,000

The most urgent of these wants is the Female College. Without it, growth for the University is out of the question. It must remain what it now is or recede.

In the cramped accommodations of the present buildings there is neither comfort nor pleasure to the teacher or student; and without the hope of something better, the courage of those most interested must give way. May we not hope that you will bring this matter before the next Legislature in such manner as will result in the relief we so much need?

It will be seen from the report of the Secretary, annexed, that the sale of lands during the past summer, none of the proceeds of which can be used for building purposes, will add materially in the future to the University income, so much so, indeed, that with the increased receipts, from a larger number of students, we shall be prepared to meet the expenses arising from a larger instructional force. The President of the University already recommends the appointment of a Tutor in English Language and History, a Professor of Descriptive Geometry and Mechanical Engineering, a Professor of Botany and Horticulture, and a Professor of Geology and Mining Engineering. This additional force is needed, not only to meet the wants of the increasing number of students, in special science, but to relieve the overburdened Professors and Tutors.

The Regents are encouraged to believe that the State will not refuse the just demands of the University, and it is in that hope that this report is respectfully submitted.

C. S. HAMILTON,
President of Board of Regents.

APPENDIX.

THE UNIVERSITY FARM.

REPORT OF PROF. W. W. DANIELLS.

Hon. Charles S. Hamilton,

Pres't of the Board of Regents of the University of Wisconsin :

Sir : I have the honor to submit the following report of work upon the University farm, since November 1, 1868.

PERMANENT IMPROVEMENTS.

Under the direction of the Farm Committee, the entire grounds west of University Hall have been surveyed and platted into acre lots, to facilitate ready reference to any part of the farm in keeping a record of experiments, and in communications to the committee and to the Board of Regents. Each lot is designated upon the plat by a letter and number, by which it may be readily distinguished from all others

A fence has been built across the farm, from north to south, between series of lots 15 and 16, making a large pasture in the western portion of the farm. From the centre of the south line of Lot E, 13, a fence has been built west, to intersect the above fence, and from the same point south to the railroad.

Lots B and C, 12, the west half of B and C, 11, and east half of B and C, 13, have also been fenced from the remainder of the farm, making two hundred and thirty rods of substantial board fence that has been erected, and giving three fields that may be used as pastures.

The grading, begun last year, of the avenue leading from the farm house to the exit into Mary street, is completed. From the west end of this avenue, a second avenue, running across the railroad to University avenue, has been opened and partially graded.

The screen of Norway spruce, on the south line of lots D has been completed to the west line of D 10. From this point, another screen running north to the centre of the west line of H 10, has been planted. The plants in each of these screens are eight feet apart, and are intended to serve as a barrier against west and southwest winds.

Evergreens have also been planted along the borders of the drives from the front entrances, to the dormitory buildings, to University Hall and to the President's house.

The seedling evergreens in cultivation last year, have been again transplanted. The arbor-vitae and Norway spruce have grown well and appear to be healthy and vigorous. The white pine have not done well from the first. Quite a large proportion are dead, and still others have an unhealthy appearance.

Fifteen hundred European larch of one year's growth, were planted last spring. They were procured for the purpose of testing the value of this tree as a timber for cultivation.

Upon lots 5 G., H. and I., and 6 G., H. and I, five hundred apple trees of the following varieties have been planted:

Early Joe,
Red Astrachan,
Duchess of Oldenberg,
Fall Orange,
St. Lawrence,
Fameuse,
Tallman Sweet,
Plumb's Cider,
Bailey's Sweet,
Seek-no-further,
Golden Russet,
Walbridge.

These are all varieties that have been thoroughly tried and are known to be hardy. Half of the trees were of two years, and half of three years' growth. All were good, stocky plants, from roots grafted at the crown, and nearly all have made an unusual growth for the first season after planting.

These hardy varieties were planted for a standard farm orchard. It is hoped another year we may be able to plant some of those varieties, the value of which, in our climate, has not yet been tested. Different methods of planting have been tried, and various methods of winter protection will be followed. The results obtained will be given in future reports.

A vineyard of one thousand Concord, and five hundred Delawares, has been planted upon lots D., 5 and 6, and the south half of E., 5 and 6. The season has been favorable, and the vines have made an excellent growth.

The Concords were planted 10x8, 10x6, and 8x6 feet apart, the Delawares 8x6 feet. Each alternate row was trenched four feet in width to the depth of eighteen inches, the remaining rows being loosened only to the depth of ten inches. This will furnish an opportunity of testing the question which some have lately raised, whether the grape does best with deep or with shallow culture, keeping the roots near the surface that they may receive more of the sun's heat. Forty bushels of ashes to the acre were sown upon this ground in 1868. No other fertilizer has been used. Forty-five apple trees have also been planted upon these lots for the purpose of comparing the effects of a southward with those of a northward exposure in the orchard.

The west half of lots 11, E, F and G, the east half of 12, E, F and G, lots 14, E and F, and 15, E and F, have been cleared and plowed, and will be ready for cultivation another year.

The farm house, which was being built at the time of my last report, is completed, and has been occupied since January last by the farm superintendent.

DONATIONS.

The Experimental Farm has received donations during the past year as follows, exclusive of those to the State Horticultural Society:

From Hon. M. K. Young, Glen Haven, Wis., 1 bbl. Early Rose potatoes, and samples of thirty-six varieties, among which is the White Rose, a seedling originating with Mr. Young.

From "The Union Fertilizer Co.," of N. Y., 1 bbl. of their "Insect and Worm Destroyer, and Fertilizer." A report of the use of this as an "Insect Destroyer," will be found under Experiments.

From Stephen W. Underhill, Croton Landing, Westchester Co., N. Y., the following seedling grapes:

3 Senasqua,
2 Croton,
2 marked 8-12.

The vine of the Senasqua has many resemblances to the Concord. The plants are healthy and have made a fine growth. The vine and leaf of the Croton appear much like the Delaware. The fruit of this variety is spoken of in the highest terms by those fruit committees who have had an opportunity to test it.

The vines of 8-12 have made a strong growth, but the leaf shows a slight tendency to mildew.

From Slater & Hansen, Madison, Wis., one corn cultivator, which does excellent work.

From Dean & Harriman, Madison, Wis., one Munroe's patent Rotary Harrow.

This is an excellent implement, doing at least twice the work of an ordinary square harrow.

EXPERIMENTS.

A scheme of experiments for the year was prepared by me, and submitted to the Board of Regents, for their approval, at their meeting in February. From that list the Farm Committee chose the following as those best adapted to present facilities for conducting experiments.

1*st*. *Wheat*—To try raising winter wheat by protecting from winds by belts of timber. The trial to be made with both red and white varieties.

2*d*. *Profits of Wheat and Corn Raising*—Cultivate an equal quantity of ground in each, keeping an account of the cost and value of production; the value of crop to be the average of market values for five years in this market.

3*d*. *Drill and Hill Planting*—Try the comparative values of drill and hill planting with corn and potatoes.

4*th*. *Potatoes*—Let experiments of last year be repeated to verify results, and take the same in connection with amount of rain falling; to be continued throughout another year at least.

5th. Corn as a Forage Crop—Try a few acres by drilling, and the same quantity by broadcast sowing.

In accordance with these instructions, the following experiments have been performed:

WINTER WHEAT.

Experiments are now in progress with the following varieties:

Treadwell, white, seed from Michigan.

Mediterranean, red, seed from Michigan.

White Winter Touzelle, imported from France, seed furnished by the Department of Agriculture at Washington.

Profits of wheat and corn raising was necessarily omitted on account of the late date of receiving the instructions.

DRILL AND HILL PLANTING CORN.

The result of this experiment was as follows:

Taking the product of drill planting as 100 for a basis of comparison, hill planting yielded 94.6, or 5.4 per cent. less than the drills. That planted in drills contained 11.4 per cent. of soft corn, that in hills 10.9 per cent. The general appearance of the corn in hills war much the best, the ears being larger and filled out better at the tips.

CORN AS A FORAGE CROP.

Equal quantities of land were sown to corn broadcast, and planted in drills three and one-half feet apart, in each case using seven bushels of seed to the acre

That planted in drills gave the largest yield* of the best forage, That sown broadcast being much the coarser.

Equal quantities of land were sown broadcast at the rate of eleven bushels of seed to the acre, and planted in drills with seven bushels as before. In this case the yield was in favor of broadcast sowing.

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*I am obliged, in these experiments, and in top dressing grass with ashes, to give the *estimated* results, as we have as yet no facilities for weighing such products.

One reason of more seed being required with broadcast sowing is that the seed cannot all be covered with a harrow, so that birds and gophers are attracted to the field and carry away much that is uncovered.

A better method for those having grain drills, is to sow nine bushels of seed to the acre, using each third tooth of the drill.

POTATOES.

The land upon which these potatoes were grown, was sward upon which no crop had ever before been raised, plowed in fall of 1868. Soil clay loam with clay subsoil. Marked with a plow three and one-half feet apart. Planted one foot apart in row, May 4th and 5th. The seed was covered uniformly three inches in depth, and was prepared as follows:

Table 1.

Plat.	Method of preparing seed.	No. lbs
1	Large, whole, one in a place	146½
2	Large, cut in 3 pieces, 1 piece in a place	46
3	Small, whole, 1 in a place	58
4	Small ends, cut in 3 pieces, 1 piece in a place	12½
5	Seed cuts of potatoes of ordinary size, 1 piece in a place	26
6	Potatoes of ordinary size without seed ends, 1 in a place	102
7	The same as No. 2	44½
8	Single eyes, 1 in a place	13

June 1st, plants coming up. June 12th, cultivated once in a row and sowed on ashes at the rate of thirty bushels per acre. The same relative growth of tops was observed that was noticed in 1868, viz.: No. 1 much the largest, Nos. 3 and 6 next in size. Cultivated second time, and hoed July 6th. Dug October 11th and 12th yielding as follows:

Table 2.

Plat.	Yield in lbs.	Bushels per acre.	Yield in lbs. of 1 lb. seed.	Size.
No. 1	1,009	350	6.2	Very large.
2	778	270	16.9	Large.
3	800	278	13.8	Large.
4	683	237	54.6	Large.
5	777	270	29.8	Large.
6	858	281	8.4	Large.
7	702	244	15.7	Large.
8	617	214	47.4	Large.

No. 1 yields most per acre, yet gives smallest increase for one pound of seed.

It will be noticed that generally, although not uniformly, as the yield increases, the rate of increase for one pound of seed diminishes.

As in last year's experiment, the size of the seed seems to affect the size of the product but slightly. The single eyes gave the smallest yield, as before, but the difference was much less marked than last year. With the exception of Plat No. 1, which gave the largest potatoes, the size was very uniform throughout. No. 4 appeared to contain fewer potatoes that were very small than any other plat. The yield corresponds to the comparative growth of tops. No. 1 largest, No. 3 and 6 next in order.

That there is a difference in the yield that cannot be attributed to the size of the seed, or the method of cultivation, will be seen by comparing Nos. 2 and 7, which were treated precisely alike, yet one yields twenty-six bushels per acre more than the other. This is a further proof of the difficulty of securing those uniform conditions in agricultural experiments, which will enable one to draw correct conclusions from a limited number of trials.

In Table No. 3 will be found the per cent of yield given by each method of planting for 1868 and 1869, the means of Nos. 2 and 7 in each case being taken as a basis of comparison.

Table 8.

Plat.	1868	1869.
No. 1	107	136
Mean of Nos. 2 and 7	100	100
No. 3	98	108
No. 4	98	92
No. 5	93	105
No. 6	115	109
Mean of Nos. 2 and 7	100	100
No. 8	73	83

Numbers 2 and seven are taken as a basis of comparison, because they correspond most nearly to the usual method of preparing seed.

HILL AND DRILL PLANTING.

Taking hill planting at 100 as a basis of comparison, and drill planting gives 78.8 per cent. This yield is upon adjacent rows, the products having been carefully weighed.

To determine the value of the "Worm and Insect Exterminator and Fertilizer," of the Union Fertilizer Company of New York, as a remedy for the Colorado potato beetle, one oz. of the "Fertilizer" was mixed with the earth of each hill of six rows through the center of the field, and for six successive mornings (July 5th to 11th) the vines were sprinkled with a solution of the "Fertilizer." This treatment had no visible effect upon the insects.

When harvested, an equal number of hills upon which no "Fertilizer" had been used, but from which the beetles had been picked by hand, yielded 180 lbs.; with "Fertilizer," as above, 164 lbs.

This experiment does not show the value of this substance as a fertilizer, but that it is of no value as a remedy for the Colorado potato beetle. The reason of a smaller yield, is doubtless that the "Fertilizer" did not kill the insects, while upon that with which this plat is compared they were all destroyed by hand picking.

In experimenting with the potato beetle, one part by weight of Paris green, mixed with eight parts of wood ashes, was found to be effective in destroying them. Yet, spreading upon land in cultivation an active mineral poison, as is the subarsenite of copper, the poisonous properties of which are not destroyed by decomposition of the salt containing them, is, at the best, of doubtful propriety.—Hand-picking has given us the most satisfactory results. The cost of this method of destroying the beetles has been $1.25 per acre for each time of picking.

The number of times it will be found necessary to pick the beetles, will depend upon warmth and wetness of the season, as they multiply more rapidly in dry, hot weather, Last year five times was not too many. This year three times has been sufficient.

EXCELSIOR OATS.

Seed from Department of Agriculture. 16 1-2 quarts weighed 25 3-4 lbs. Sowed upon 1-4 of an acre, May 18th, soil rich clay loam, with clay sub-soil. Growth very rank. Began lodging before heading out. When harvested were three-fourths laid. Crop harvested August 11th and threshed August 19th, yielding 9 bushels. One bushel weighed 27 lbs. The straw was badly affected with rust and mildew.

The land upon which these oats were sown would, in ordinary seasons, have been the best we have in cultivation, but the unusual amount of rain this season had an injurious effect upon all our crops planted upon level land, these oats among others.

Three other varieties of oats furnished by the Department of Agriculture, the White Schonen, Black Swedish and Somerset, were sown, but the heavy rains ruined them entirely.

Of those varieties of cabbage which have been in cultivation, the Schweinfurt Quintal, and Marblehead Drumhead, (cannon ball variety), are the only kinds that promise to be of special value. Lenormand's short-stemmed Cauliflower also promises well.

Upon one portion of the land prepared last year for mowing, unleached ashes were sown last spring, at the rate of forty bushels per acre. The estimated yield upon this portion of the field was double that upon any other portion.

The grass was mostly Kentucky Blue Grass (*Poa pratensis*), and white clover; the soil clayey with clay subsoil.

ANALYTICAL CHEMISTRY.

The Laboratory has been so far completed as to furnish excellent facilities to students in Analytical Chemistry. All necessary apparatus has been purchased so that this department of the University is meeting all the demands made upon it at present,

Laboratory practice is elective in all departments of the University, except that of Agriculture; yet the number of students desiring instruction in this branch is much larger than last year, and doubtless will continue to increase from year to year.

The course of instruction in qualitative analysis is divided into four series, as follows:

1. Simple salts in solution.
2. Simple salts in solid form, including blow-pipe analysis.
3. Mixtures, and double salts in solution, including the separation of bases
4. Mixtures, complex compounds, soils, ores, and refractory minerals.

The four series include one hundred analyses, leading gradually from the most simple to the most complex.

BOTANY.

After the regular course of lectures in Structural and Systematic Botany, I delivered a course to a class of eighteen special students, upon the minute structure of plants, embracing the use of the microscope, and upon Economic Botany.

METEOROLOGICAL OBSERVATIONS.

The record of meteorological observations, which for several years has been omitted, was resumed at the beginning of the present year, and is now under my direction. The following tables contain the principal results of the observations to November 1st.

The system adopted is that of the Smithsonian Institution, the hours of observation being 7 A. M., 2 P. M., and 9 P. M.

The temperature is given in degrees and tenths F.

The amount of cloudiness is expressed by a number indicating the tenths of the sky overcast. The following abbreviations are used :

St.—Stratus.
Cu.—Cumulus.
Cir.—Cirrus.
Nim.—Nimbus.
Cu.-St.—Cumulo-stratus.
Cir.-St.—Cirro-stratus.
Cir.-Cu.—Cirro-cumulus.

The direction of the wind is taken for eight points of the compass, the figures accompanying represent the force on a scale from 1, a very light breeze, to 10, a most violent hurricane. In the summary of observations, the winds are classified in four divisions, SW. and W., etc., being placed together, and the percentage of winds from each direction is given for each month.

The height of the barometer is indicated by inches and decimals, and corrected for the expansion above 32°.

The "force or pressure of vapor" expresses the weight of moisture in the air, by indicating in inches the height of a column of mercury that is sustained by it.

"Relative humidity" shows the per cent. of complete saturation existing at the time when the observation is made.

Latitude 43 deg., 5 min. N.
Longitude 12 deg., 24 min. W.
Height above the sea 1,068 feet.

The season has been a remarkable one in many respects.

January and February were mild and pleasant, with only an average amount of snow and rain. March was exceedingly cold and dry. The average temperature for the first half of the month being 6 degrees colder than the mean of either January or February, while the rain-fall was less than half an inch. April was also cold, with less than the usual quantity of rain. During May, June, July and August, 20.69 inches of rain fell, much more than the usual quantity.

The summer was very cloudy, and was remarkable for a peculiar haziness of the atmosphere, even when no clouds were visible. The mean temperature of September was but 5 degrees below that of August, which, with the lateness to which the frost held off, added greatly to the value of the corn crop of the country.

W. W. DANIELLS,
Prof. of Agriculture and Analytical Chemistry.

JANUARY, 1869.

Day of Month.	THERMOMETER IN THE OPEN AIR.				RAIN AND SNOW.			
	7 A. M.	2 P. M.	9 P. M.	Mean.	Time of beginning of rain or snow.	Time of ending of rain or snow.	Amount of rain or melted snow in gauge, in inches.	Depth of snow, in inches.
1	21.0	25.0	24.0	23.3	....	....	....	....
2	22.0	26.0	25.0	24.3	....	10 A. M.	0.50	3
3	30.0	36.0	37.0	34.3	9½P. M.	....	....	....
4	35.0	35.0	22.0	30.6	....	1 A. M.	0.03	....
5	18.0	25.0	20.0	31.0	....	....	....	....
6	26 0	42.0	37.0	35.0	....	....	....	....
7	36.0	40.0	32.5	36.1	....	....	....	....
8	29.0	29.0	26.0	27.6	....	....	....	....
9	23.0	22.0	9.0	18.0	2 A. M.	....	....	....
10	.0	13.0	7.0	6.6	....	3 A. M.	1.12	7
11	11.0	11.0	10.0	3.1	....	....	....	....
12	2.0	25.0	24.0	17.0	....	....	....	....
13	29.0	34.0	27.0	30.0	....	....	....	....
14	20.0	33.0	28.0	27.0	....	....	....	....
15	19.0	29.0	20.0	22.6	....	....	....	....
16	14.0	29.0	24.0	22.3	....	....	....	....
17	19.0	24.0	21.0	21.3	....	....	....	....
18	20.0	27.0	25.0	24.0	....	....	....	....
19	17.0	28.0	25.0	23.3	....	....	....	....
20	28.0	32.0	27.0	27.3	....	....	....	....
21	24.0	35.0	30.0	29.6	....	....	....	....
22	20.0	26.0	21.0	22.3	....	....	....	....
23	22.0	33.0	31.0	28.6	....	....	....	....
24	18.0	25.0	19.0	20.6	....	....	....	....
25	7.0	5.0	1.0	0.3	....	....	....	....
26	7.0	16.0	13.0	9.6	....	....	....	....
27	22.0	33.0	33.0	29.3	4 A. M.	6 P. M.	0.06	¾
28	29.0	33.0	33.0	31.6	....	....	....	....
29	34.0	31.0	23.0	29.3	3 A. M.	8 P. M.	0.98	5.5
30	17.5	19.0	10.0	15.5	....	....	....	....
31	6.0	20.0	15.0	13.6	....	....	....	....
Sum	......	......	......	......	....	....	2.69	16.25
M'n.	......	......	......	23.7	....	....	....	....
Av.	......	......	......	......	....	....	....	....

JANUARY, 1869—continued.

Day of Month.	CLOUDS.						WINDS.					
	7 A. M		2 P. M.		9 P. M.		7 A. M.		2 P. M.		9 P. M.	
	Amount of cloudiness.	Kind of clouds.	Amount of cloudiness.	Kind of clouds.	Amount of cloudiness.	Kind of clouds.	Direction.	Force.	Direction.	Force.	Direction.	Force.
1	10	Nim .	10	Nim ..	10	Nim...	N.E..	4	N.E..	2	N.E..	3
2	10	Nim. .	5	Cu-cir.	10	Nim..	N.E..	1	W...	2	S.W.	2
3	10	Cir-st.	10	Cu-st .	10	Nim...	S....	2	S.W .	3	S. ..	2
4	10	Nim...	5	Cir-cu.	0	......	S.W.	4	S.W .	3	W...	3
5	10	Cu-st .	1	St ...	1	Cu....	W...	3	W...	3	S.W.	3
6	3	Cir-st.	3	Cir...	0	......	S.W.	2	S.W.	1	S. ..	2
7	0	......	3	Cir...	2	Cir-st.	S. ..	2	W...	3	N.W.	3
8	10	Nim...	10	Cu-st .	10	Nim...	N.E..	3	N.E..	3	N.E..	2
6	10	Cu-st .	10	Cu.st .	0	... ..	W...	3	W...	3	W...	3
10	0	......	0	......	1	Cu....	W...	3	W...	1	W...	1
11	1	St....	0	......	0	......	N....	2	W...	2	W...	1
12	1	Cir-st.	5	Cir...	0	......	S.W.	1	S. ..	2	S.W.	1
13	8	Cir-cu.	10	Cir-cu.	0	......	S. ..	1	S.W.	2	S W.	2
14	5	Cir-st.	5	Cir...	0	......	S.W.	2	S.W .	2	S.W.	1
15	5	Cir-st.	4	Cir...	0	......	N.W.	2	N....	1	N.E..	1
16	0	......	3	Cum..	0	......	N.E..	2	N.E .	1	N.E..	1
17	10	Nim...	10	Cu-st .	10	St....	N.W.	2	N.W.	3	N.W.	1
18	10	Nim...	8	Cir-cu.	10	Nim...	N.W.	2	W...	2	S.W .	3
19	1	Cu-st .	2	Cir. ..	0	......	S.W.	3	S.W.	3	S.W.	3
20	0	......	0	......	0	......	W...	3	W...	3	S.W.	4
21	1	Cu-st .	1	Cir-cu.	2	Cir-cu.	W..	1	W...	1	W...	3
22	10	Cu-st..	5	Cir-cu.	0	......	N.E..	3	N.E..	3	W...	1
23	1	St....	0	......	0	......	S.W..	3	W...	2	S.W.	3
24	0	......	10	Cu-st .	10	Cu-st .	W...	3	N. ..	3	N....	4
25	0	......	1	Cir-st.	1	Cir-st.	N....	3	W...	1	N....	2
26	5	Cu-cir.	5	Cir....	8	Cir-cu.	N.W.	3	N.W.	3	W...	2
27	10	Nim...	10	Nim...	10	Cu-st .	S.W.	3	S.W.	3	S.W.	3
28	10	Nim...	10	St....	10	Nim ..	S.W	1	S.W .	1	S. ..	1
29	10	Nim...	10	Nim...	10	Nim...	N.W.	3	N.E..	3	N ...	3
30	9	St....	5	Cir-cu.	1	St....	N.W.	4	N.E..	3	N.W.	3
31	10	St....	9	Cir-cu.	0	......	N.W.	3	N.W.	2	N....	1
Sum	....	......	....	......	....	......	......	....	......	....	......	...
M'n.	5.6	......	5.5	......	3.5	......	......	2.5	......	2.2	......	2.2
Av.	....	......	4.8	......	....	......	......	....	......	2.3	......	....

JANUARY, 1869—continued.

BAROMETER.				FORCE OR PRESSURE OF VAPOR, IN INCHES.			RELATIVE HUMIDITY or PER CENT OF SATURATION.			Day of Month.
BAROMETER HEIGHT REDUCED TO FREEZING POINT.										
7 A. M.	2 P. M.	9 P. M.	Mean.	7 A. M.	2 P. M.	9 P. M.	7 A. M.	2 P. M.	9 P. M.	
28.908	29.202	28.710	28.936	.106	.123	.082	86	87	53	1
28.822	28.691	28.899	28.804	.118	.135	.099	100	88	64	2
28.394	28.505	28.535	28.478	.167	.199	.208	100	90	91	3
28.206	29.168	28.452	28.275	.191	.165	.111	90	72	86	4
29.203	28.852	29.195	29.083	.087	129	.198	84	88	100	5
28.595	28.776	28.785	28.718	.129	.254	.195	88	92	82	6
29.274	28.653	29.459	29.128	.129	.222	.175	88	83	89	7
28.680	29.179	29.280	29.046	.160	.160	129	100	100	88	8
29.095	28.672	29.315	29.027	.128	.118	.065	100	100	100	9
29.217	28.901	29.513	29.290	.044	.078	.068	100	100	100	10
28.732	28.718	28.852	28.767	.027	.094	.068	100	73	100	11
29.136	29.054	29.109	29.099	.048	.135	.129	100	100	100	12
28.693	29.468	29.082	29.077	.160	.170	.147	100	80	100	13
28.988	28.575	29.171	28.908	.084	.162	.153	71	80	100	14
28.945	28.882	29.180	29.002	.103	.160	.113	100	100	100	15
29.196	28.930	28.996	29.007	.082	.160	.129	100	100	100	16
28.993	29.382	28.796	29.057	.098	.123	.113	100	100	100	17
29.452	29.171	29.277	29.300	.108	.147	.135	100	100	100	18
29.171	28.884	28.983	29.012	.094	.153	.135	100	100	100	19
29.040	28.971	28.868	28.959	.123	.168	.135	100	89	88	20
28.880	28.948	29.364	29.064	.129	.152	.143	100	63	79	21
28.741	29.559	28.672	28.990	.108	.141	.113	100	100	100	22
29.172	28.774	28.830	28.925	.118	.175	.162	100	89	89	23
28.798	28.877	28.801	28.825	.098	.135	.103	100	100	100	24
29.029	29.001	29.401	29.143	.032	.043	.034	100	75	71	25
29.136	29.385	28.896	29.139	.044	.090	.078	100	100	100	26
28.724	28.722	28.780	28.742	.118	.182	.175	100	95	89	27
28.583	29.256	28.718	28.852	.148	.175	.175	89	89	89	28
28.977	28.491	29.082	28.850	.183	.174	.123	90	100	100	29
29.093	28.925	29.293	29.103	.094	.091	.068	100	85	100	30
29.161	29.377	29.060	29.199	.057	.096	.086	100	85	100	31
										Sum
			28.961	.107	.146	.126	96	90	96	M'n.
					.124			94		Av.

FEBRUARY, 1869.

Day of month.	THERMOMETER IN THE OPEN AIR.				RAIN AND SNOW.			
	7 A. M.	2 P. M.	9 P. M.	Mean.	Time of beginning of rain or snow.	Time of ending of rain or snow.	Amount of rain or melted snow in guage, in inches.	Depth of snow in inches.
1	21 5	32.0	28.5	28.6	....	....	....	....
2	31.0	29.5	29.0	29.8	4 A. M.	....	....	....
3	21.5	24.0	16.0	20.5	....	11 P. M.	0.90	8.0
4	2.0	11.5	11.0	8.1	....	....	....	....
5	2.5	2.3	19.0	14.8	....	....	....	....
6	17.5	30.0	20.0	22.5	....	....	....	....
7	22.5	32.5	30.0	28.1	....	....	....	....
8	27.5	33.0	29.0	29.9	....	....	....	....
9	30.0	38.0	36.0	34.6	....	....	....	....
10	28 0	40.0	36.0	34.8	....	....	....	....
11	26.0	41.0	40.0	35.6	....	....	....	....
12	40.5	50.5	40.0	43.6	11 P. M.	....	....	....
13	35.0	34.0	32.0	33.6	....	....	....	....
14	34.0	35.5	30.0	33.1	....	8 P. M.	1.30	....
15	25.5	27.5	24.0	25.6	....	*..........	....	....
16	16.0	36.0	37.5	29.9	....	....	....	....
17	32.5	32.5	28.0	31.0	2 A. M.	4 A. M.	0.15	....
18	28.0	34.0	28.0	28.3	....	....	....	....
19	10.0	32.5	23.0	18.8	....	....	....	....
20	20.5	21.0	17.0	19.5	....	....	....	....
21	11.0	14.5	12.0	12.5	....	....	....	....
22	3.5	13.0	10.0	8.8	....	....	....	....
23	1.0	18.0	15.5	11.5	....	....	....	....
24	5.0	16.0	9 0	10.0	....	....	....	....
25	10.0	25.5	25.0	20.8	....	....	....	....
26	5.0	11.5	4.0	6.7	*..........	....	....	....
27	-1.0	13.0	9.0	7.0	....	....	....	....
28	......	22.0	17.0	13.0	....	....	....	....
Sum	......	......	......	......	....	....	2.35	8.0
Mn's	......	......	......	22.9	....	....	....	....
Av.	......	......	......	......	....	....	....	....

* Slight snow storm.

FEBRUARY, 1869—continued.

CLOUDS.						WINDS.						
7 A. M.		2 P. M.		9 P. M.		7 A. M.		2 P. M.		9 P. M.		Day of month.
Amount of cloudiness.	Kind of clouds.	Amount of cloudiness.	Kinds of clouds.	Amount of oudiness.	Kinds of clouds.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
10	Nim. .	5	Cir-cu.	3	Nim. .	E....	3	S.E .	3	E ...	3	1
10	Nim. .	10	Nim. .	10	Nim. .	N.E..	3	N. E.	3	N. E.	4	2
10	Cu-st .	10	Cu-st .	0	......	N ...	4	N. E.	5	N ...	3	3
1	St ...	1	Cu-st .	0	......	N.W.	3	N ...	3	N.W.	3	4
0	......	1	Cu st .	0	......	W ...	2	S.W.	3	S. W.	3	5
10	Cu-st .	10	Cu-st .	0	......	S. W.	1	S ...	1	S....	1	6
10	Nim. .	10	Nim. .	10	Nim. .	S. W.	1	S. E.	1	S. E.	1	7
10	Nim. .	10	Nim. .	10	Nim. .	S. W.	1	S. E.	1	S. E.	1	8
10	Nim. .	10	Cu-st .	10	Nim. .	S. E.	1	S. W.	1	S. E.	1	9
10	Nim. .	8	Cir-cu.	0	......	S. E.	2	S. W.	3	S. W.	2	10
3	Cu-st .	9	Cir-cu.	9	Cir-cu	S. W.	2	S. W.	3	S. E.	1	11
9	Cu-st .	9	Cir ...	4	Cu ...	S. E.	1	S. W.	1	S. W.	1	12
10	Nim. .	10	Cu-st .	10	Nim. .	N. E.	2	N. E.	3	N. E.	3	13
10	Nim. .	10	Nim. .	10	Nim. .	N. E.	3	N. E.	2	N. W.	3	14
10	Cu-st .	10	Cum..	0	......	N. W.	3	N.W.	3	N.W.	3	15
1	Cir-st.	1	Cu-st .	10	Cu ...	W...	3	S. W.	3	S....	3	16
10	Cu-st .	1	Cu-st .	1	Cir ...	N. W.	3	N. W.	3	N.W.	2	17
10	Nim. .	5	Cu ...	3	Cir ...	S. W.	1	S.W.	3	N. W.	3	18
0	......	10	St....	10	Nim .	W...	3	S.W.	1	S.W.	1	19
1	Cu-st .	4	Cu-st .	10	Nim. .	N.W.	3	N.W.	3	N ...	3	20
10	St....	10	Nim .	10	Nim. .	N....	3	N. W.	3	N ...	3	21
5	Cir-cu.	5	Cir ..	9	Cir-cu.	N. W.	3	N.W.	3	N ...	3	22
5	Cir-cu.	1	Cir-st.	10	Nim. .	N. W.	3	N ...	3	S. W.	3	23
0	......	0	......	1	Cir ...	N. W.	3	W...	3	S.W.	3	24
8	Cu-st .	10	Cu-st .	10	Cir-cu.	S. W.	3	S ...	3	S ...	4	25
1	Cu ..	4	Cir-cu.	0	......	N. W.	4	N. W.	3	N ...	3	26
0	......	0	......	4	Cir-st.	N. W.	3	N ...	3	W...	3	27
1	St....	9	Cir-cu.	9	Cu-st .	N. W.	2	W...	3	S. W.	3	28
...	......	....	......	....	......	......	....	......	...	......	....	Sum
.2	......	6.5	.....	5.8	......	......	2.2	......	2.3	......	2.2	M'ns
...	......	6.2	......	...	......	......	...	......	2.2	......	....	Av.

FEBRUARY, 1869—continued.

Day of month.	BAROMETER. BAROMETER HEIGHT REDUCED TO FREEZING POINT. 7 A. M.	2 P. M.	9 P. M.	Mean.	FORCE OR PRESSURE OF VAPOR, IN INCHES. 7 A. M.	2 P. M.	9 P. M.	RELATIVE HUMIDITY or PER CENT OF SATURATION. 7 A. M.	2 P. M.	9 P. M.
1	29.310	29.274	28.907	29.163	.107	.162	.147	93	84	94
2	28.988	28.727	28.635	28.783	.174	.154	.160	100	94	100
3	28.764	28.596	28.979	25.779	.107	.117	.090	93	87	100
4	28.986	29.016	29.096	29.032	.048	.066	.071	100	90	100
5	29.139	29.020	29.241	29.133	.048	.111	.103	100	86	100
6	29.065	29.147	29.196	29 136	.088	.143	.096	92	79	85
7	29.279	29.185	29.159	29.207	.112	.162	.167	93	84	100
8	29.156	29.464	29 128	29.246	.135	.169	.169	88	84	100
9	28.837	28.871	28.601	28.769	.167	.216	.199	100	91	90
10	29.074	28.797	29.153	29.008	.153	.182	.186	100	61	81
11	29.129	29 011	28.918	29.018	.141	.204	.222	100	68	83
12	28.905	28.946	29.041	28 964	.228	.301	.235	87	71	91
13	28.768	29.161	28.969	28.966	.204	.196	.181	100	100	100
14	28.669	28.586	28.467	28.574	.183	.197	.155	90	95	89
15	28.790	28.610	28.826	28.775	.123	.135	.114	87	88	87
16	28.822	28.705	29.611	28.712	.078	.173	.188	83	73	77
17	28.508	28.061	28.717	28.432	.162	.122	.142	84	57	88
18	28.432	28.453	28.517	28.467	.153	.157	.111	100	71	86
19	28.783	28.719	28.732	28.744	.068	.112	.118	100	93	100
20	28.840	28.845	28.996	28.893	.102	.113	.094	92	100	100
21	29.013	29.010	29.016	29.013	.071	.082	.075	100	100	100
22	29.073	28.915	28.873	28.987	.044	.078	.057	86	100	79
23	28.684	28.697	28.749	29.710	.046	.075	.080	100	70	91
24	29.107	29.204	29.211	29.174	.043	.078	.054	75	83	78
25	29.174	28.883	28.649	28.868	.068	.129	.135	100	93	100
26	28.960	29.101	29.268	29.109	.055	.066	.052	100	90	100
27	29.271	29.267	29.271	29.269	.042	.067	.054	100	81	78
28	29.232	29.210	29.118	29.186	.044	.106	.082	100	86	84
Sum	......	......	......	......	......	......	......	......	......	......
M'ns	......	......	......	28.932	107	.138	.126	94	84	91
Av.	......	......	......	......	......	.123	......		89	

APRIL, 1869.

THERMOMETER IN THE OPEN AIR.				RAIN AND SNOW.				Day of Month.
7 A. M.	2 P. M.	9 P. M.	Mean.	Time of beginning of rain or snow.	Time of ending of rain or snow.	Amount of rain or melted snow in guage, in inches.	Depth of snow, in inches.	
28.0	26.0	19.0	24.33	....	7 P. M.	.45	5	1
12.5	26.5	27.0	22.00	....	....	....	....	2
17.0	30.5	27.0	24.83	....	....	....	....	3
27.0	40.5	32.0	33.16	....	....	....	....	4
35.5	45.0	37.0	39.16	....	....	....	....	5
35.0	41.0	26.0	37.33	....	....	....	....	6
36.0	50.0	42.0	42.66	....	....	....	....	7
35.0	48.5	45.0	42.83	....	....	....	....	8
33.5	49.0	40.0	40.83	....	....	....	....	9
31.0	38.0	35.0	31.33	....	....	....	....	10
30·0	40.0	35.0	35.00	....	....	....	....	11
29.0	38.5	29.0	32.16	*..........	....	....	....	12
26.0	35.0	31.0	30.33	2 A. M.	4 A. M.	.08	1	13
32.0	44.0	42.5	32.83	....	....	....	....	14
45.5	52.0	51.0	45.50	2 P. M.	....	....	....	15
48.0	43.0	36.0	42.33	....	1 P. M.	.55	....	16
43.0	63.0	56.0	54.00	....	....	....	....	17
45.0	62.0	47.0	51.33	6 P. M.	8 P. M.	1.60	....	18
51.0	56.0	45 0	50.66	....	....	....	....	19
38.0	40.0	37.0	38.33	....	....	....	....	20
37.0	55.0	50.0	47.33	....	....	....	....	21
41.0	57.0	51.0	49.66	....	....	....	....	22
51.0	49.0	46.0	48.66	....	....	....	....	23
42.0	48.0	42.0	44.00	....	....	....	....	24
47.0	57.5	51.0	51.83	....	....	....	....	25
44.0	49.5	47.0	50.16	11½A. M.	12 P. M.	0.20	....	26
50.0	61.5	56.0	35.83	9 P. M.	....	....	....	27
52.0	56.5	51.0	52.83	....	7 P. M.	0.20	....	28
42.5	54.0	44.0	46.84	....	....	....	....	29
37.0	50.0	46.0	44.33	....	....	....	....	30
......	......	......	......	....	....	2.72	6	Sum
......	......	......	36.74	....	....	....	....	M'n.
......	......	......	......	....	....	....	....	Av.

*Slight snow storm.

APRIL, 1869—continued.

Day of month.	CLOUDS.						WINDS.					
	7 A. M.		2 P. M.		9 P. M.		7 A. M.		2 P. M.		9 P. M.	
	Amount of cloudiness.	Kinds of clouds.	Amount of cloudiness.	Kinds of clouds.	Amount of cloudiness.	Kinds of clouds.	Direction.	Force.	Direction.	Force.	Direction.	Force.
1	10	Nim ..	10	Nim ..	10	Nim ..	N. E.	4	N.E.	4	N ...	4
2	5	St....	8	Cir-cu.	5	Cu ...	N.W.	3	N.W.	3	N.W.	2
3	1	Cu-st .	1	Cu ...	0	......	N.W.	2	N.W.	2	N.W.	3
4	0	......	1	Cir....	2	St....	W...	3	W ..	2	W...	3
5	1	Cir-st.	5	Cu ...	1	Cu ...	N.W.	3	W ..	3	N.W.	3
6	4	Cu-st. .	8	Cu ...	1	St....	W...	3	W ..	3	W...	2
7	2	Cu ...	8	Cu ...	0	......	W...	3	W ..	4	W...	2
8	2	Cu-st. .	3	Cu-st. .	9	Cu ...	W...	2	W ..	1	W...	1
9	9	Cu st. .	5	Cir-cu.	9	St....	W..	1	W ..	2	N. E.	2
10	9	Cir-st.	9	Cir-cu.	0	......	N. E.	2	N.E.	....	N. E.	2
11	5	Cir....	10	Cu ...	9	Nim ..	N. E.	2	N.E.	1	N. E.	1
12	10	Nim ..	9	Cu ...	4	Cu-st .	N. E.	3	N ...	1	N.W.	1
13	9	Cu-st .	5	Cu ..	0	......	N. E.	1	N.E.	2	N. E.	2
14	1	Cir.Cu	9	Cu-st. .	1	Cu ...	S. E.	2	S. E.	3	N. E.	4
15	5	Cu-st .	10	Nim ..	10	Nim ..	S....	1	S ...	3	S...	3
16	10	Nim ..	10	Cu-st. .	0	......	S....	3	N.W.	4	S....	3
17	0	......	4	Cu-st. .	0	......	W...	3	S.W.	3	S....	3
18	7	Cir-cu.	10	St.....	8	St....	W...	2	S. E.	2	N. E.	2
19	8	St....	6	Cir-cu.	7	St....	S.W.	4	W ..	1	N.W.	3
20	10	St....	10	St....	8	St....	N ...	4	N.W.	4	N.W.	3
21	0	......	0	......	6	Cir-st.	N.W.	2	N.W.	1	W...	1
22	6	Cir-cu	7	Cir....	6	Cu ...	S. E..	3	E ...	3	E ...	3
23	8	Cir-cu.	8	Cu-st..	7	Cir-st.	S.W.	3	S.W.	3	W...	1
24	8	Cir-st..	5	Cu-st. .	0	......	N.W.	2	N.W.	2	N.W.	1
25	0	Cir....	3	Cir....	5	Cu-cir.	W...	1	N ...	1	S. W.	1
26	9	Cu-st. .	10	Nim ..	10	Nim ..	S....	1	E ...	2	E ...	1
27	9	Cu ...	5	Cu....	8	Cu ...	S....	1	W ..	3	S....	1
28	10	Cu-st. .	8	Cu....	9	Cu ...	S.W.	2	W ..	1	N.W.	1
29	10	Cu-st..	4	Cu....	3	St...	N. E.	3	N E.	2	N.W.	2
30	8	Cir st.	9	Cir-st.	8	Cu ...	N. E.	3	N.E.	3	N. E.	1
Sum	....	......	....	......	....	......	......	....	......	....	......	....
M'r.	5.7	......	6.5	......	5.2	......	......	2.4	......	2.3	......	2
Av.	....	......	5.8	.... .	..	......	......	....	......	2	......	....

APRIL, 1869—continued.

BAROMETER. BAROMETER HEIGHT REDUCED TO FREEZING POINT.				FORCE OR PRESSURE OF VAPOR, IN INCHES.			RELATIVE HUMIDITY or PER CENT OF SATURATION.			Day of month.
7 A. M.	2 P. M.	9 P. M.	Mean.	7 A. M.	2 P. M.	9 P. M.	7 A. M.	2 P. M.	9 P. M.	
28.688	28.628	28.758	28.689	.158	.129	.091	100	88	85	1
28.903	28.925	29.467	29.098	.069	.185	.185	90	93	88	2
29.130	29.124	29.080	29.111	.082	.126	.147	84	65	100	3
29.061	28.975	28.826	28.987	.135	.215	.155	88	79	79	4
28.511	28.546	28.600	28.552	.171	.234	.169	76	65	65	5
28.586	28.701	28.797	28.688	.165	.179	.186	72	55	81	6
28.817	28.742	28.941	28.833	.212	.268	.189	100	58	56	7
28.935	28.796	28.946	28.892	.139	.228	.234	56	49	65	8
29.003	28.935	29.098	29.012	.169	.163	.182	84	28	61	9
29.156	29.112	29.130	29.132	.150	.177	.139	80	66	56	10
29.158	29.106	29.074	26.112	.143	.182	.178	79	61	81	11
29.084	29.040	29.076	29.066	.148	.171	.148	89	62	89	12
29.108	29.064	29.156	29.109	.129	.126	.138	88	49	71	13
29.050	28.995	29.036	29.027	.155	.196	.149	79	52	74	14
28.907	28.863	28.854	28.876	.253	.362	.361	74	87	93	15
28.696	28.673	28.734	28.701	.296	.267	.208	79	100	91	16
28.778	28 726	28.728	28.744	.232	.455	.367	73	58	71	17
28.586	28.478	28.385	28.483	.280	.462	.322	88	65	92	18
28.371	28.412	28.478	28.420	.348	.403	.273	86	67	85	19
28.445	28 384	28.472	28.467	.216	.222	.195	91	83	82	20
28.726	28.656	28.873	28.818	.195	.314	.296	82	53	68	21
29.058	28.846	28.757	28.887	.231	.373	.321	83	62	74	22
28.659	28.829	29.024	28.806	.295	.308	.298	68	79	92	23
29.054	29.227	29.253	29.178	.254	.269	.215	92	67	69	24
29.221	29.234	29.120	29.191	.270	.340	.295	72	52	63	25
28.975	28.868	28.748	28.868	.210	.302	.297	58	76	85	26
28.861	28.872	28.776	28.836	.321	.437	.396	80	63	76	27
28.920	28.742	28.777	28.813	.362	.403	.361	87	79	98	28
28.926	28.970	28.944	28.946	.234	.299	.236	80	52	70	29
29.005	28.944	28.834	28.927	.182	.282	.272	73	68	78	30
....	....	....	....	......	......	......	....	....	....	Sum
....	....	....	28.868	.210	.267	.231	81	66	78	M'n.
....	....	....	....	.....	.286	......	....	75	....	Av..

MAY, 1869.

Day of Month.	THERMOMETER IN THE OPEN AIR.				RAIN AND SNOW.			
	7 A. M.	2 P. M.	9 P. M.	Mean.	Time of beginning of rain or snow.	Time of ending of rain or snow	Amount of rain or melted snow in guage, in inches.	Depth of snow, in inches.
1	43.0	55.0	35.0	43.3	....	....	....	....
2	45.0	54.0	48.0	49.0	....	....	....	....
3	43.5	61.0	56.0	53.5	....	....	....	....
4	52.5	73.5	58.0	61.3	4 P. M.	....	....	....
5	49.5	48.0	45.0	47.5	....	12 M.	0.30	....
6	46.0	54.0	49.0	49.6	....	....	....	....
7	41.5	56.5	55.0	51.0	....	....	....	....
8	54.0	63.0	57.0	58.0	....	....	....	....
9	55.0	73.0	60.0	62.6	....	....	....	....
10	58.0	77.5	65.0	66.6	1 A. M.	3 A. M.	0.21	....
11	59.5	62.0	61.0	60.8	8 A. M.	12 M.	0.12	....
12	54.5	45.5	46.0	48.6	4 A. M.	....	....	....
13	44.5	47.0	47.5	46.5	....	4 A. M.	0.50	....
14	46.5	61.0	57.5	55.0	....	....	....	....
15	52.0	57.5	47.0	52.1	5 P. M.	11½ P. M.	0.41	....
16	44.0	53.0	49.0	48.6	....	....	....	....
17	42.5	50.5	47.0	46.6	....	....	....	....
18	45.0	52.0	50.5	49.1	....	....	....	....
19	51.0	60.5	51.0	54.1	....	....	....	....
20	47.0	51.5	49.0	49.1	....	....	....	....
21	46.0	56.5	54.0	52.1	....	....	....	....
22	52.0	62.0	58.0	56.6	....	....	....	....
23	59.0	72.5	62.5	64.6	....	....	....	....
24	59.0	73.0	66.0	66.0	....	....	....	....
25	65.5	81.5	74.0	73.6	....	....	....	....
26	64.0	50.0	45.0	53.0	1½A. M.	3 A. M.	2.05	....
27	43.5	48.0	46.0	45.8	1 A. M.	4 A. M.	0.60	....
28	43.5	50.5	50.0	48.0	12½A. M.	8½ P. M.	0.56	....
29	47.5	60.0	55.0	52.1	....	....	....	....
30	56.0	63.0	61.0	60.0	10 A. M.	....	....	....
31	57.0	69.5	63.0	63.1	....	8 A. M.	0.15	....
Sum	......	......	......	......	....	....	4.90	....
M'ns	......	......	......	54.4	....	....	....	....
Av.	......	......	......	......	....	....	....	....

MAY, 1869—continued.

CLOUDS.						WINDS.						
7 A. M.		2 P. M.		9 P. M.		7 A. M.		2 P. M.		9 P. M.		
Amount of cloudiness.	Kind of clouds.	Amount of cloudiness.	Kind of clouds.	Amount of cloudiness.	Kind of clouds.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Day of Month.
10	Cu ...	8	Cu ...	5	Cu ...	N.E .	1	N.W.	1	N.E..	2	1
1	Cir-cu.	5	Cu ..	1	Cu-st .	N.E .	3	N.W.	1	N.W.	1	2
0	......	0	......	0	......	S.E .	1	S.E .	1	N.E .	1	3
4	Cir. ..	4	Cir. ..	10	Nim. .	S.E .	1	S.E .	3	E. ..	1	4
9	Cu-st .	10	Cu-st .	5	Cu ...	E....	2	N.E..	3	N.E..	3	5
1	Cu-st .	4	Cu ...	0	......	N ...	3	N.E..	3	N.E..	3	6
0	......	1	Cir-cu.	0	......	N.E..	3	......	....	N.E..	1	7
0	......	4	Cir-cu.	0	......	S. ..	1	S. ..	3	S.W.	3	8
10	Cu ...	0	......	0	......	W .	3	S.W.	3	S.W.	1	9
8	Cu-st .	7	Cir-cu.	4	Cu ...	S. ..	3	S.W.	4	S.W.	1	10
10	Cu. ..	9	Cu-st .	4	Cu-st .	S.W.	2	S.W.	1	S.W.	1	11
10	Nim. .	10	Nim. .	10	Nim. .	N.E..	3	N.E..	3	N.E..	4	12
10	Nim. .	10	Cu-st .	10	Nim. .	N.E..	3	N....	3	N ...	3	13
1	Cir-st.	1	Cir-cu.	5	Cu ...	N....	3	N....	2	N.E .	3	14
3	Cu....	4	Cu ...	5	Cu ...	E....	1	N.W.	3	......	....	15
3	Cu ...	8	Cu-st .	10	Cu-st .	N.W.	3	N.W.	3	N.W.	3	16
1	Cir-cu.	10	Cu-st .	1	Cu-st .	N.W.	3	N.W.	3	N.W.	1	17
1	St....	8	Cu-st .	9	Cir-cu.	N ...	1	N.W.	2	N....	1	18
1	Cir st.	8	Cu ...	10	Cir-cu.	N....	1	N....	1	E....	3	19
10	Nim. .	10	Nim. .	9	Cu ...	E....	1	E....	1	E....	1	20
5	Cu ...	8	Cu ...	5	Cu ...	E....	1	N.E..	1	N.E..	1	21
3	Cu ...	1	Cu ...	3	St ...	N ...	3	N ...	2	N ...	2	22
1	Cu ...	3	Cu-st .	4	Cir ...	N.W.	3	S.W.	3	S.W.	1	23
10	Cu-st .	10	Cir-st.	7	Cu-st .	S.W.	3	S.W.	4	S.W.	4	24
3	Cir-cu.	2	Cu-st .	5	Cu-st .	S.W.	4	S.W.	4	S.W.	4	25
3	Cu-st .	10	Cu-st .	9	Cir-cu.	S.E..	3	N.E..	3	......	....	26
10	Nim. .	10	Nim. .	10	Nim. .	E....	3	E....	3	E....	3	27
10	Nim. .	5	Cir-cu.	5	Cu. ..	N.E..	2	W ..	2	N....	2	28
10	Nim. .	5	Cir-cu.	5	Cu. ..	N.E .	2	N.E..	1	......	....	29
10	Nim. .	8	Cir-cu.	8	Cu-st .	E....	1	E....	1	E....	1	30
10	Nim. .	8	St-cu .	5	Cu ...	E....	2	N....	1	N....	1	31
...	......	...	......	...	......	......	....	......	....	......	....	Sum
5.4	......	6.2	......	5.2	......	......	2.2	......	2.2	......	1.7	M'ns
...	......	5.6	......	...	......	......	....	......	2.0	......	....	Av.

MAY, 1869—continued.

Day of Month.	BAROMETER.				FORCE OF PRESSURE OF VAPOR, IN INCHES.			RELATIVE HUMIDITY OR PER CENT OF SATURATION.		
	BAROMETER HEIGHT REDUCED TO FREEZING POINT.									
	7 A. M.	2 P. M.	9 P. M.	Mean.	7 A. M.	2 P. M.	9 P. M.	7 A. M.	2 P. M.	9 P. M.
1	28.676	28.616	28.778	28.690	.225	.314	.165	70	53	72
2	28.836	28.848	28.824	28.836	.260	.312	.230	78	56	51
3	28.937	28.797	28.770	28.834	.238	.403	.370	77	54	66
4	28.745	28.694	28.709	28.715	.355	.643	.376	84	52	59
5	28.807	28.956	29.030	28.931	.288	.309	.273	70	85	85
6	29.127	29.129	29.108	29.121	.272	.325	.282	78	61	67
7	29.147	29.166	28.921	29.058	.211	.243	.231	72	31	36
8	29.169	28.913	29.019	29.033	.304	.469	.373	57	62	62
9	28.919	28.905	28.812	28.878	.321	.536	.385	55	37	53
10	28.712	28.606	28.620	28.646	.426	.812	.551	82	67	75
11	28.581	28.559	28.515	28.551	.440	.516	.497	75	84	83
12	28.485	28.392	28.436	28 437	.345	.293	.298	68	96	92
13	28.525	28.548	28.549	28.540	.269	.297	.303	88	85	89
14	28.594	28.562	28.515	28 557	.291	.376	.366	89	47	60
15	28.477	28.479	28.576	28.510	.362	.392	.323	87	69	100
16	28.796	28.866	28.962	28.874	.249	.363	.295	77	81	73
17	28.967	28.964	28.970	28.967	.221	.328	.283	72	83	78
18	28.966	28.920	28.896	28.927	.286	.309	.277	92	64	75
19	28.903	28.905	28.926	28.911	.308	.431	.321	69	66	74
20	28.919	28.929	28.901	28.916	.297	.328	.295	85	77	73
21	28.906	28.934	28.921	28.920	.258	.363	.365	71	64	76
22	29.093	29.052	28.996	29.047	.349	.409	.429	81	50	77
23	28.973	28.883	28.847	28.901	.473	.590	.523	88	46	86
24	28.807	28.726	28.667	28.733	.433	.623	.545	73	48	67
25	28.635	28.642	28.679	28.652	.476	.874	.731	75	54	67
26	28.771	28.913	29.415	29.033	.556	.334	.273	84	86	85
27	28.858	28.850	28.879	28.862	.267	.309	.298	81	85	92
28	28.846	28.876	28.923	28.881	.271	.328	.334	96	83	86
29	28.962	28.941	28.974	28.955	.316	.451	.407	96	73	87
30	28.856	28.839	28.901	28.865	.410	.536	.523	82	84	94
31	28.916	28.884	29.259	29.019	.439	.567	.496	88	57	70
Sum	....	....	....	....	......	......	......	....	....	....
M'ns	....	....	....	28.830	.329	.432	.369	79	66	74
Av.	....	....	....	....	......	.376	......	....	73	....

JUNE, 1869.

THERMOMETER IN THE OPEN AIR.				RAIN AND SNOW.				Day of month.
7 A. M.	2 P. M.	9 P. M.	Mean.	Time of beginning of rain or snow.	Time of ending of rain or snow.	Amount of rain or melted snow in guage, in inches.	Depth of snow, in inches.	
62.0	75.0	67.0	68.0					1
61.5	74.5	65 5	67.1					2
66.0	78.5	69.0	71.1					3
64.0	61 0	56.0	60.3					4
48.0	59.0	57.0	52.6					5
49.0	59.0	55.5	54.5					6
52.5	71.0	62.0	61.8					7
61.5	70.0	63.0	64.8					8
59.5	67.0	59.0	61.8	3 A. M.	9½A. M.	.610		9
51.0	65.0	61.0	59.0					10
60.0	72.0	69.0	67.0					11
66.0	65.0	60.0	67.0	3 A. M.	10 A. M.	.900		12
58.5	63.0	54.5	58.6	9 A. M.				13
51.5	55.5	52.0	53.0		4 P. M.	.200		14
50.0	57.0	54 0	51.6					15
53.0	64.5	59.0	58.8					16
56.5	64.5	68.0	63.0	5 A. M.				17
61.0	67.0	62.0	63.3		4 P. M.	.500		18
63.5	75.0	68.0	67.8	2 P. M.	7 P. M.	.300		19
59.5	64.5	60.0	61.3					20
62.0	66.0	60.0	62.6					21
64.5	68.0	59 0	63.8					22
59.0	68.0	58.0	61.6					23
59.0	68.0	57.0	61.3	8 P. M.				24
65.0	64.0	60.0	63.0					25
61.0	67.0	64.0	63.0					26
67.0	65.0	62.0	64.6		12 M.	3.33		27
66.0	72.0	71.0	66.3					28
71.0	78.0	68.0	72.3	5 P. M.	6 P. M.	0.30		39
64.0	72.0	67.0	67.6					30
						6.24		Sum
			62.5					M'n.
								Av.

JUNE, 1869—continued.

Day of month.	CLOUDS.						WINDS.					
	7 A. M.		2 P. M.		9 P. M.		7 A. M.		2 P. M.		9 P. M.	
	Amount of cloudiness.	Kind of clouds.	Amount of cloudiness.	Kind of clouds.	Amount of cloudiness.	Kind of clouds.	Direction.	Force.	Direction.	Force.	Direction.	Force.
1	8	Cir-cu.	4	Cu....	6	Cir cu.	N.E .	1	N....	1	N....	2
2	5	Cir-st.	1	Cu ...	8	Cu-st .	N.W.	1	S.W.	3	S.W.	2
3	0	......	5	Cir.cu.	5	St...	S.W.	2	S.W	3	S.W.	3
4	8	Cu.st .	2	Cu....	0	......	S.W.	3	N.W.	4	N.W.	3
5	5	Cir-cu.	5	Cir-cu.	8	Cu-st .	N.W.	3	N.W.	2	N....	2
6	0	......	4	Cir-cu.	5	St....	N.E..	2	N.E..	3	N.E..	1
7	0	......	1	Cir-cu.	0	......	S.W.	2	S.W.	2	S....	2
8	5	Cir...	9	Cir-st.	9	St....	S.W.	2	S.E..	4	S.E..	3
9	10	Nim...	2	Cu....	0	......	S.E..	1	N.W.	4	W...	1
10	1	Cu-st .	1	Cu....	0	......	N.W.	3	N.W.	2	W...	1
11	1	Cir...	2	Cir-cu.	1	Cu ...	N W.	2	N W.	1	W...	2
12	5	Cir...	8	Cu-st..	10	Nim ..	S.W.	2	S.W.	4	S.W.	2
13	9	Cu....	8	Cu-st. .	10	Nim ..	S.W	3	S.W.	3	S.W.	3
14	9	St-cu .	10	Cu.st. .	9	Cu ...	N.W.	3	N.W.	3	W...	3
15	9	Cir-cu.	5	Cir-Cu.	4	Cu-st .	W...	3	W...	3	W...	3
16	0	......	5	Cir-Cu.	1	St....	W...	3	W...	2	W...	1
17	10	Nim...	10	Nim ..	5	Cu-st .	S....	1	S.E..	2	S.W.	3
18	10	Cir-st.	10	Cir-cu.	5	Cir...	S.W.	2	W...	1	W...	1
19	10	Nim...	10	Nim ..	6	Cu-st .	S.W.	2	S.W.	2	S.W.	3
20	3	Cir-cu.	7	Cir ...	5	Cir ..	N.W.	3	S W.	3	S.W.	3
21	5	Cir-cu.	8	Cir.cu.	0	.....	S.W.	2	W...	3	N.W.	1
22	5	Cir ...	8	Cu ...	0	......	W...	2	W...	3	W...	1
23	0	......	5	Cir-cu.	0	.... .	N.W.	3	N....	3	W...	1
24	0	......	0	Cu ...	0	......	S.W.	1	S.W.	2	......	....
25	7	St....	10	St....	10	St....	S.W.	1	W...	2	N.W.	1
26	10	St...	0	......	10	St....	N.W.	2	N.W.	2	......	....
27	9	St....	5	Cir-st.	9	St....	W...	2	S.W.	3	......	....
28	0	......	5	Cu ...	6	Cu-st .	W...	2	N....	2	N....	1
29	9	Cu-st .	8	Cu-st. .	....	......	......	....	N.W.	2	......	....
30	9	Cu-st .	....	......	....	......	S.W.	2	S....	3	......	....
Sum	....	......	....	......	....	......	......	....	......	....	......	....
M'n.	5	......	5	......	4	......	......	2	......	2.5	......	1.6
Av.	....	......	4.6	......	....	......	......	....	......	2	......	....

JUNE, 1869—continued.

BAROMETER.				FORCE OF PRESSURE OF VAPOR, IN INCHES.			RELATIVE HUMIDITY OR PER CENT OF SATURATION,			Day of month.
BROMETER HEIGHT NEDUCED TO FREEZING POINT.										
7 A. M.	2 P. M.	9 P. M.	Mean.	7 A. M.	2 P. M.	7 A. M.	7 P. M.	2 P. M.	9 P. M.	
29.027	29.186	29.041	29.084	.467	.692	.543	69	52	79	1
29.084	29.081	29.038	29.067	.503	.673	.557	86	79	77	2
29.015	28 925	28.868	28.936	.506	.775	.628	80	52	73	3
28.983	28.894	28.962	28.946	.556	.403	.343	84	54	57	4
29 097	29.091	29.104	29.097	.256	.380	.229	61	56	41	5
29.199	29.160	29.155	29.171	.295	.380	.400	73	56	84	6
29.188	29.116	29.129	29.144	.374	.597	.489	73	53	75	7
29.097	28 988	28.991	29.025	.463	.585	.509	71	56	75	8
28.829	28.830	28.897	28.856	.480	.595	.462	91	76	65	9
28.995	29.022	29.007	29.006	.335	.417	.559	80	41	72	10
28.988	28.830	28.713	28.843	.425	.623	.588	64	53	62	11
28.691	28.519	28.419	28.543	.559	.733	.518	72	61	100	12
28 261	28.240	28.324	28.275	.436	.469	.385	80	62	84	13
28.438	28.537	28.646	28.540	.315	.347	.322	71	64	69	14
28.727	28.747	28.782	28.752	.308	.359	.352	74	58	70	15
28.932	28.929	28.955	28.988	.337	.456	.446	70	54	77	16
28.940	28.793	28.754	28.829	.429	.563	.631	91	87	81	17
28.929	28.944	28·953	28.941	510	.604	.502	88	94	78	18
28.967	28 808	28.822	28.865	.569	827	.604	97	86	73	19
28.910	28.910	28.914	28.911	.466	.536	.478	85	77	83	20
28.894	28.822	28.836	28.850	.529	.599	.505	89	85	94	21
28.793	28.740	28.865	28.799	.563	.631	.407	87	81	63	22
28.958	28.980	28.975	28.971	.407	.564	.456	63	61	88	23
28.974	29.091	29.029	29.031	.460	.591	.426	83	68	82	24
29.062	29.045	28.988	99.031	.510	.509	.451	63	75	73	25
28.913	28.910	28.859	28.894	497	.635	.543	83	90	79	26
28.751	28.792	28.862	28.801	.621	.591	.543	85	89	94	27
28.931	28.938	28.940	28.936	.612	.717	.718	90	77	86	28
28.954	29.069	28.897	28.973	.718	.838	.658	86	85	90	29
29.002	29.030	29.021	29.017	.570	.677	.608	89	66	80	30
										Sum
			28.868	.469	.588	.496	79	68	76	M'n.
					.517			74		Av.

JULY, 1869.

Day of Month.	THERMOMETER IN THE OPEN AIR.				RAIN AND SNOW.			
	7 A. M.	2 P. M.	9 P. M.	Mean.	Time of beginning of rain or snow.	Time of ending of rain or snow	Amount of rain or melted snow in guage, in inches.	Depth of snow, in inches.
1	78.0	75.0	70.0	72.6	....	....	....	....
2	70.0	73.0	72.0	71.6	6½ A. M.	....	0.64	....
3	74.0	80.0	71.0	75.0	....	8 A. M.	0.48	....
4	60.0	67.5	60.0	62.5	....	....	....	....
5	64.0	69.0	62.0	65.0	....	....	....	....
6	68.5	75.0	69.0	66.0	....	....	....	....
7	74.0	74.0	67.0	71.5	....	....	....	....
8	69.0	75.0	66.0	70.0	....	....	....	....
9	69.0	78.0	71.0	77.6	....	....	....	....
10	75.0	84.0	74.0	76.6	....	....	....	....
11	66.0	68.0	65.0	66.8	....	....	....	....
12	60.0	64.0	56.0	60.0	....	....	....	....
13	68.0	70.0	68.0	67.0	....	....	....	....
14	70.0	78.0	71.0	78.0	2 A. M.	8 A. M.	0.89	....
15	69.0	72.5	71.0	70.8	10 A. M.	11.50A. M.	0.74	....
16	74.0	75.0	68.0	72.8	10 P. M.	11.50P. M.	0.01	....
17	67.0	75.0	68.0	70.0	1 P. M.	2 P. M.	0.01	....
18	65.0	74.0	68.0	69.0	2 P. M.	....	....	....
19	69.0	71.5	62.0	67.5	....	12 P. M.	0.65	....
20	58.0	65.0	64.0	62.8	....	....	....	....
21	68.0	72.0	66.0	67.0	....	....	....	....
22	70.0	78.0	65.0	69.8	....	....	....	....
23	68.0	77.0	74.0	73.0	....	....	....	....
24	74.0	84.0	75.0	77.6	10 P. M.	12 P. M.	0.75	....
25	67.0	73.0	70.0	70.0	....	....	....	......
26	67.0	74.0	66.0	69.0	....	....	....	....
27	67.0	75.0	67.0	69.6	10 P. M.	10½P. M.	0.01	....
28	61.0	68.0	68.0	64.0	....	....	....	....
29	59.0	70.0	65.0	64.6	....	....	....	....
30	64.0	73.0	68.0	66.6	....	....	....	....
31	65.0	74.0	65.0	68.0	....	....	....	....
Sum	......	......	......	......	....	....	3.68	....
M'ns	......		......	69.05	....	....	....	....
Av .	......	......	......	......	....	....	....	....

JULY, 1869—continued.

CLOUDS.						WINDS.						
7 A. M		2 P. M.		9 P. M.		7 A. M.		2 P. M.		9 P. M.		
Amount of Cloudness.	Kind of clouds.	Amount of cloudiness.	Kind of clouds.	Amount of cloudiness.	Kind of clouds.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Day of Month.
5	Ci....	9	Haze .	0	......	W ..	5	W ..	4	W ..	2	1
6	St....	8	Cu ...	4	Nim ..	W ..	6	S.W.	4	S.W.	3	2
5	Str ...	6	Str ...	5	Str. ..	S.W.	3	W ..	4	N.W.	4	3
1	Str ...	0	......	0	......	W ..	6	W ..	3	W ...	3	4
2	Cum ..	9	Cum-st	3	Ci....	W ..	2	S.E .	4	......	....	5
8	Cu ...	0	.....	0	Ci....	S.W.	3	S.E .	2	......	....	6
5	Ci-str.	3	Ci....	0	......	S.E .	3	N.W.	3	N.E...	3	7
3	Ci ...	0	......	0	......	......	....	......	....	......	....	8
3	Cu ...	0	......	0	......	......	....	......	....	......	....	9
9	Cu-st .	5	Cu ...	0	Cu-st .	......	....	S.W .	4	S.W .	4	10
7	St....	4	Cu ...	2	St....	N.E..	3	......	....	N.E..	1	11
3	St....	9	St....	10	St....	......	....	......	....	......	....	12
10	St....	9	St....	10	St....	E ...	1	......	....	S.E. .	3	13
8	Nim ..	8	Cu-st .	0	......	N.W.	1	N.W .	1	E ...	1	14
7	St....	5	St....	4	Nim ..	S.E .	1	S. ..	4	S.W.	2	15
4	Cu-st .	9	Nim. .	2	Cir...	N.W.	1	......	..	N.W.	1	16
3	Ci-st..	9	Nim. .	3	Cir...	......	....	......	....	......	....	17
3	Ci-st..	6	Cum ..	0	......	N.W .	1	N. ..	2	......	....	18
0	......	9	Cum ..	9	Nim...	......	....	N ...	4	......	....	19
9	Nim ..	6	Cum ..	3	Cu-st .	N.W.	6	N.W.	4	N.W.	2	20
1	Cum ..	2	Cum ..	0	......	W...	3	N ...	3	N.W.	4	21
8	St....	6	St....	0	......	N.W.	3	S.W.	3	S. ...	3	22
0	.. ..	3	Cu-st .	0	Ci-st .	S.W.	4	S.W.	4	S.W.	3	23
7	Cu-st .	0	Haze .	4	Ni.....	S.W.	4	S.W.	4	S.W.	4	24
10	St....	10	Cu-st .	9	St....	N.W.	3	W...	2	W...	2	25
3	Ci-st..	3	Cu ...	0	......	W...	2	W...	4	W...	3	26
4	Cu-st .	3	Ci....	3	Ni....	W...	2	S ...	4	W...	2	27
3	Cu ...	5	Cum ..	0	......	N.W.	4	N.W.	3	N.W.	3	28
0	.....	1	Cum ..	0	......	N.W.	1	N.W.	2	N.W.	2	29
0	......	0	......	0	......	N.W.	1	W...	1	W...	1	30
0	......	3	Ci-cu .	0	St....	S.W.	2	S....	3	......	....	31
....	......	....	......	....	.....	......	....	......	....	......	....	Sum
44	......	49	......	23	......	......	2	......	2	......	2	Mn's
....	......	38	......	....	.....	......	....	......	2	......	....	Av.

JULY, 1869—continued.

Day of Month.	BAROMETER. BAROMETER HEIGHT REDUCED TO FREEZING POINT.				FORCE OF PRESSURE OF VAPOR, IN INCHES.			RELATIVE HUMIDITY or PER CENT OF SATURATION.		
	7 A. M.	2 P. M.	9 P. M.	Mean.	7 A. M.	2 P. M.	9 P. M.	7 A. M.	2 P. M.	9 P. M.
1	29.003	29.067	28.891	28.987	.691	.781	.680	68	67	81
2	28.828	28.679	28.664	28.722	.726	.785	.772	97	82	86
3	28.680	28.721	28.907	28.769	.785	.942	.771	82	76	95
1	29 093	29.655	29.349	29.365	.425	.550	.470	64	58	73
5	29.269	29.188	28.897	29.118	.489	.555	.529	62	56	89
6	29.018	28.987	29.689	29.231	.576	.778	.641	77	71	77
7	28.880	29.177	29.598	29.218	.785	.691	.554	82	57	64
8	29.391	28.847	28.853	29.030	.614	.719	.586	68	58	80
9	28.888	28.821	28 718	28.809	.682	.828	.691	90	62	77
10	28.549	26.582	28.652	28.577	.818	1.029	.704	82	64	60
11	29.002	29.047	29.070	29.039	.505	.577	.551	56	64	75
12	28.891	29.177	29.389	29.152	.577	.704	.572	64	73	76
13	28.897	28.888	28.866	28.883	.586	.705	.671	84	81	95
14	28.820	28.887	28.867	28.841	.695	.863	.718	95	82	86
15	28.855	28.792	28.832	28.826	.695	.772	.698	95	86	85
16	28.898	28.947	28.962	28.935	.772	.772	.631	78	78	81
17	29.008	28.947	28.938	28.962	.608	.717	.631	80	64	81
18	28.941	28.960	28.941	28.947	.570	.717	.612	89	64	62
19	28.920	28.844	28.804	28.856	.631	.638	.549	81	62	89
20	28.912	28.915	28.937	28.921	.456	.497	.497	88	59	59
21	29.007	28.996	29.032	29.012	.508	.637	.519	66	56	60
22	29.081	29.043	29.015	29.046	.652	.691	.551	73	63	75
23	28.891	28.824	28.818	28.844	.617	.832	.785	77	72	82
24	28.872	28.835	28.242	28.649	.772	1.015	.800	78	62	78
25	28.798	28.785	28.783	28.788	.608	.744	.698	80	78	85
26	28.748	28.762	28.881	28.800	.608	.677	.519	80	54	60
27	28.891	28.779	28.758	28.809	.608	.746	.608	80	64	80
28	28.907	28.868	28.920	28.898	.470	.550	.496	78	58	70
29	29.030	29.040	29.055	29.041	.446	.599	.524	77	59	66
30	29.125	29.053	29.080	29.088	.508	.781	.586	66	74	84
31	29.155	29.100	29.125	29.126	.564	.772	.577	79	78	85
Sum										
M'ns				28.951	.609	.739	.617	77	67	77
Av.						.655			73	

AUGUST, 1869.

THERMOMETER IN THE OPEN AIR.				RAIN AND SNOW.				Day of Month.
7 A. M.	2 P. M.	9 P. M.	Mean.	Time of beginning of rain or snow.	Time of ending of rain or snow	Amount of rain or melted snow in guage, in inches.	Depth of snow, in inches.	
63.0	76.0	70.0	69.6					1
72.0	78.0	70.0	73.3					2
65.0	76.0	67.0	69.3					3
72.0	74.0	62.0	55.3					4
54.0	65.0	57.0	59.6					5
55.0	64.0	60.0	61.6					6
57.0	70.0	58.0	63.6					7
57.0	71.0	63.0	68.0					8
59.0	77.0	68.0	70.6					9
66.0	76.0	70.0	68.5	10 A. M.	11 A. M.	.05		10
63.5	77.0	65.0	72.3					11
64.0	80.0	73.0	68.5					12
66.5	73.0	66.0	74.0	9½ P. M.				13
70.0	79.0	73.0	61.6		11 A. M.	.77		14
60.0	65.0	60.0	64.6					15
57.0	70.0	67.0	68.3	6¼A. M.	8½A. M.	.51		16
63.0	74.0	67.0	73.0					17
66.0	81.0	72.0	80.6					18
77.0	87.0	78.0	65.3	8½ P. M.	9 P. M.	.06		19
67.0	71.0	58.0	61.6	3 P. M.	7 P. M.	1.27		20
56.0	65.0	64.0	66.6					21
65.0	67.0	68.0	73.0					22
64.0	80.0	75.0	88.3					23
79.0	89.0	77.0	73.0	10 P. M.	11½ P. M.	.26		24
71.0	77.0	71.0	68.3					25
67.0	73.0	65.0	71.0					26
71.0	73.0	69.0	70.6	12 M.				27
69.0	75.0	68.0	62.6		3 A. M.	3.00		28
60.0	66.0	62.0	61.3					29
59.0	65.0	60.0	58.5					30
57.0	64.0	60.0	58.5					31
						5.92		Sum
			66.86					M'ns
								Av.

AUGUST, 1869—continued.

Day of Month.	CLOUDS.						WINDS.					
	7 A. M.		2 P. M.		9 P. M.		7 A. M.		2 P. M.		9 P. M.	
	Amount of cloudiness.	Kind of clouds.	Amount of cloudiness.	Kind of clouds.	Amount of cloudiness.	Kind of clouds.	Direction.	Force.	Direction.	Force.	Direction.	Force.
1	3	Cir...	4	Cir-st.	0	......	S....	3	S....	4	S....	4
2	10	St....	2	Cu. ..	0	......	S.W.	3	N.W.	8	N.W.	2
3	0	......	0	......	0	......	N.W.	1	N.W.	1	......	....
4	5	Cu....	10	Cu-st .	9	St....	N....	1	N ...	1	N.W.	4
5	7	Cir...	0	......	10	Cir-cn	N.E..	3	......	....	......	...
6	9	Cir-st.	5	Cir-st.	0	......	N.E..	3	E....	2	N.E..	3
8	5	Cir-st.	2	Cir-cu	5	Cir-st.	N.E..	8	E....	2	N.E..	4
8	4	St....	4	St....	2	Cir-st.	N.E..	4	S....	4	S....	2
9	5	St....	5	St....	1	St....	S....	2	S.W.	2	S.W.	2
10	8	Cir-st.	10	Nim..	10	Cu. ..	S....	1	S.W.	2	S.W.	2
11	*	......	5	Cir-cu	0	......	N.W.	2	N.E..	3	N....	2
12	*	......	5	Nim..	8	St....	N....	1	S.W.	2	S.W.	2
13	*	.....	5	Cir-cu.	10	St....	S.W.	2	N.E..	1	E....	3
14	10	Nim..	2	Cir...	8	St....	S.E..	3	S.W.	3	S.W.	3
15	9	St....	0	......	9	Cir-st.	N....	3	......	....	E....	3
16	10	Nim..	9	St....	0	......	N.W.	8	N.W.	2	N.W.	1
17	†	......	0	......	4	Cir...	N.W.	1	N.W.	1	S....	2
18	9	St....	2	Cu ...	8	Cir...	N.W.	1	......	....	S....	3
19	2	Cir-st.	2	Cu ...	9	Cu ...	S....	8	S.W.	4	S.W	3
20	10	Nim..	10	Nim..	10	Nim..	N.W.	3	N.W.	2	N.E..	3
21	10	Nim..	10	St....	10	St....	N.E..	8	N.E..	2	......	....
22	10	St....	10	St....	10	St....	N.E..	2	N.E..	1	......	....
28	0	......	5	Cir...	0	......	N.E..	2	S....	2	S....	1
24	0	......	8	Cir...	10	Nim..	S....	2	S.W.	2	N.W.	3
25	9	Cir-cu	3	Cir...	2	Cir-st.	N.W.	2	N.W.	2	N.W.	1
26	1	Cir...	9	Cir-st.	0	......	E....	2	E....	2	S.W.	1
27	9	St....	9	Nim..	0	......	S.W.	2	S.W.	2	......	....
28	10	Cu....	0	......	2	Cu. ..	N.W.	3	N.W.	8	N....	3
28	5	Cir...	5	Cir-cu	8	St....	N....	3	N....	8	N....	2
80	0	......	8	Cu....	8	St....	N.E..	2	N.E..	8	N....	2
31	4	Cir-cu.	5	Cir-cu.	0	......	N E..	3	N.E..	3	N.E..	3
Sum	....	......	....	......	....	......	......	....	......	....	......	....
M'n.	5.3	......	4.8	......	4.4	......	......	2.3	......	2	......	2
Av.	....	......	4.8	......	....	......	......	....	......	2.1	......	....

* Foggy. †Haze.

AUGUST, 1869—continued.

BAROMETER.				FORCE OF PRESSURE OF VAPOR, IN INCHES.			RELATIVE HUMIDITY or PER CENT OF SATURATION.			
BAROMETER HEIGHT REDUCED TO FREEZING POINT.										
7 A. M.	2 P. M.	9 P. M.	Mean.	7 A. M.	2 P. M.	9 P. M.	7 A. M.	2 P. M.	9 P. M.	Day of Month.
29.125	28.995	28.960	29.026	.478	.789	.680	83	68	81	1
28.886	28.987	28.991	28.955	.771	.850	.652	95	68	73	2
29.033	28.985	28.899	28.969	.551	.721	.621	75	53	85	3
28.838	28.880	28.891	28.869	.731	.799	.462	81	86	65	4
29.059	59.052	29.168	29.093	.528	.537	.359	30	71	58	5
29.197	29.347	29.258	29.267	.394	.524	.451	82	66	73	6
29.324	29.295	29.239	29.286	.406	.462	.403	74	65	54	7
29.417	29.131	28.914	29.154	.423	.626	.516	88	65	84	8
29.005	28.987	28.958	28.983	.460	.832	.631	83	72	81	9
28.916	29.087	28.996	29.000	.599	.813	.695	85	82	95	10
29.084	29.080	29.090	29.083	.576	.457	.551	100	49	75	11
29.041	28.982	28.952	28.998	.590	.901	.785	97	66	90	12
29.022	29.011	29.002	29.011	.599	.744	.612	85	78	90	13
28.706	28.714	28.703	28.707	.720	.882	.772	95	69	86	14
28.936	28.922	28.941	28.933	.464	.731	.464	77	74	77	15
28.952	28.840	28.980	28.924	.466	.666	.635	100	77	90	16
29.102	29.010	29.030	29.037	.536	.532	.621	84	63	85	17
29.015	28.926	28.853	28.931	.586	.921	.758	80	63	90	18
28.801	28.811	28.770	28.794	.886	1.009	.873	87	43	83	19
28.855	28.891	28.944	28.896	.635	.732	.462	90	90	91	20
28.973	29.019	29.052	29.013	.443	.564	.570	97	79	89	21
29.078	29.078	29.102	29.086	.604	.635	.658	94	90	90	22
29.110	29.086	29.056	29.084	.583	.969	.841	94	83	91	23
29.074	29.003	29.006	29.027	.923	1.270	.832	79	75	72	24
29.066	29.069	29.087	29.073	.718	.792	.691	86	62	77	25
29.133	29.120	28.982	29.045	.595	.691	.591	76	63	89	26
28.888	28.900	28.875	28.886	.745	.785	.708	95	100	90	27
28.638	28.385	29.088	28.703	.695	.787	.617	95	74	77	28
29.067	29.059	29.394	29.173	.464	.639	.543	77	100	94	29
29.233	29 172	29.183	29.196	.446	.497	.464	77	59	77	30
29.260	29.223	29.223	29.235	.452	.489	.451	94	62	73	31
....	....	....	....	......	......	......	....	....	....	Sum
....	....	....	29.014	.586	.730	.612	85	71	81	M'ns
....	....	....	....	......	.642	.....	....	79	....	Av.

SEPTEMBER, 1869.

Day of month.	THERMOMETER IN THE OPEN AIR.				RAIN AND SNOW.			
	7 A. M.	2 P. M.	9 P. M.	Mean.	Time of beginning of rain or snow.	Time of ending of rain or snow.	Amount of rain or melted snow in guage, in inches.	Depth of snow in inches.
1	58.0	61.0	57.0	60.0				
2	55.0	70.0	60.0	61.6				
3	56.5	74.0	69.0	66.5	2 A. M.			
4	63.0	65.5	66.0	64.8		3 P. M.	0.40	
5	66.0	69.0	60.0	65.0				
6	57.0	64.5	56.0	59.1				
7	55.0	60.0	59.0	58.0				
8	53.0	64.5	59.0	58.8				
9	55.0	67.0	59.0	60.3				
10	57.0	72.0	66.0	65.0				
11	62.0	67.0	62.0	63.6				
12	64.0	76.0	67.0	69.0				
13	66.0	75.0	69.5	70.1	11½P. M.			
14	64.5	61.0	57.0	68.8		4 P. M.	1.100	
15	57.0	61.5	54.5	57.5				
16	56.5	63.0	52.0	57.1	3½A. M.	4½P. M.	0.150	
17	54.0	67.5	60.0	60.5				
18	68.0	79.0	69.0	73.0				
19	70.0	81.0	74.0	75.3	11½P. M.			
20	68.0	70.0	60.0	66.0		5 A. M.	0.33	
21	52.0	66.0	60.0	59.3				
22	54.0	69.0	60.0	61.0				
23	63.0	73.0	69.0	68.3				
24	68.0	70.0	60.5	66.1	9 A. M.	11½P. M.	0.70	
25	44.0	50.5	46.0	46.8				
26	39.5	48.0	45.0	46.1				
27	40.5	50.0	42.0	46.1				
28	42.5	65.0	57.0	54.5				
29	50.5	66.0	56.0	57.5				
30	55.0	68.0	58.0	60.3				
Sum							2.680	
M'n.				61.8				
Av..								

SEPTEMBER, 1869—continued.

CLOUDS.						WINDS.						
7 A. M.		2 P. M.		9 P. M.		7 A. M.		2 P. M.		9 H. M.		
Amount of cloudiness.	Kinds of clouds	Amount of cloudiness.	Kinds of clouds.	Amount of cloudiness.	Kinds of clouds	Direction.	Force.	Direction.	Force.	Direction.	Force.	Day of month.
5	Cir-cu.	2	Cir-st.	2	St. ...	E ...	3	S. E.	3	S. E.	3	1
5	Cir-cu.	5	Cir ...	2	St. ...	S. E.	3	S ...	3	S ...	2	2
3	Cir ...	5	Cu-cir	10	Cu ...	S ...	3	S ...	3	S ...	3	3
10	Cu-st .	10	Nim ..	10	Nim ..	S.W.	4	S.W.	3	S ...	2	4
9	Cu-st .	9	Cu-st.	1	Cir-st .	S.W.	3	S.W.	3	S.W.	2	5
1	Cu ...	2	Cir-cu	4	Cu-st. .	W ..	3	W ..	2	W ..	1	6
2	Cir-st.	8	Cir-cu	0	......	W ..	2	W ..	3	N. W.	3	7
0	......	5	Cir-cu	0	......	N.W.	3	N.W.	3	N. W.	3	8
1	Cir ...	1	Cu ...	0	......	N.W.	2	N.W.	1	N.W.	1	9
9	Cir-cu.	6	Cir-st.	5	Cu-st. .	S.W.	2	S.W.	3	S.W.	3	10
10	Cir-st.	0	......	10	Cu-st. .	N.W.	4	N.W.	2	N. E.	2	11
9	Cir-cu.	5	Cir-cu	8	Cir-st.	S. E.	3	S. E.	3	S. E.	2	12
5	Cir-st.	9	Cir...	9	Cir-st.	S. E.	3	S. E.	4	S. E.	4	13
10	Nim ..	10	Nim ..	6	Cir-cu.	S. E.	3	S. E.	3	S. E.	2	14
5	Cir-st .	10	Cu-st .	9	Cir-cu.	S. E.	2	S. E.	2	S. W.	2	15
0	......	5	Cir-cu.	5	Cir...	S. W.	3	S. W.	4	S. W.	2	16
0	......	4	Cir...	4	Cir st.	S.W.	2	S W.	3	S. W.	1	17
5	Cir ..	2	Cir-cu.	0	......	S ...	3	S. W.	3	S ...	1	18
0	......	2	Cum..	2	Cir ...	S ...	2	S ...	3	S ...	2	19
9	Nim..	2	Cir....	2	Cir ...	S.W.	3	S.W.	2	W...	2	20
5	Cir...	1	Cir...	5	Cir-cu.	N ...	2	E ...	1	N.W.	2	21
10	Fog ..	5	Cir ...	2	Cir-st.	E ...	1	E ...	1	E....	3	22
4	Cir-st.	5	Cir-cu.	0	......	S. E.	3	S. E.	3	S. E.	3	23
9	St....	10	Nim ..	10	Nim ..	S....	3	S.W.	3	S.W.	2	24
8	Cu-st..	9	St	4	St	N.W.	3	N.W.	4	N.W.	4	25
0	......	9	Cu-st..	9	St	N.W.	3	N ...	3	N ...	3	26
4	Cir-st.	5	Cu ...	0	......	N ...	2	N ...	2	N ...	1	27
5	Cir-cu	5	Cir-st.	0	......	S ...	3	S ...	3	S ...	2	28
1	Cir...	0	......	0	......	S ...	3	S ...	4	S ...	3	29
0	......	0	......	5	Cir...	S ...	1	S ...	2	S ...	1	30
....	......	....	......	....	......	......	....	......	....	......	....	Sum
5	......	5	......	4	......	......	2.6	......	2.6	......	2.2	M'ns
....	......	4.6	......	....	......	......	....	......	2.4	......	....	Av.

SEPTEMBER, 1869—continued.

Day of month.	BAROMETER.				FORCE OF PRESSURE OF VAPOR, IN INCHES;			RELATIVE HUMIDITY or PER CENT OF SATURATION.		
	BAROMETER HEIGHT REDUCED TO FREEZING POINT.									
	7 A. M.	2 P. M.	9 P. M.	Mean.	7 A. M.	2 P. M.	9 P. M.	7 A. M.	2 P. M.	9 P. M.
1	29.225	29.211	29.227	29.221	.405	.349	.268	94	81	58
2	29.254	29.144	29.128	29.175	.349	.353	.367	81	48	71
3	29.058	29.200	29.045	29.101	.564	.497	.564	79	59	79
4	28.988	29.149	28.894	29.010	.403	.542	.570	79	87	89
5	28.846	28.862	28.857	28.855	.536	.628	.456	84	73	88
6	28.968	28.925	28.968	28.951	.322	.279	.336	69	46	75
7	28.889	29.005	28.992	28.962	.321	.310	.380	74	60	76
8	28.943	29.028	28.992	28.987	.321	.337	.372	80	55	70
9	29.055	29.099	28.960	29.038	.349	.556	.296	81	84	59
10	29.029	28.979	28.935	28.981	.350	.455	.502	75	58	78
11	29.023	28.999	29.052	29.024	.456	.438	.446	88	68	77
12	28.966	28.909	28.853	28.902	.497	.652	.425	83	73	64
13	28.846	28.843	28.859	28.849	.502	.591	.391	78	68	54
14	28.866	28.851	28.890	28.869	.490	.442	413	81	83	77
15	28.812	28.905	28.798	28.839	.322	.290	.372	69	53	78
16	28.827	28.866	28.887	28.860	.403	.270	.282	79	47	73
17	28.982	28.953	28.938	28.957	.355	.268	.396	80	40	76
18	29.007	28.993	29.014	29.014	.543	.612	.577	79	62	85
19	29.400	29.066	29.048	29.171	.682	.745	.617	90	70	77
20	29.038	29.202	29.219	29.153	.564	.836	.352	79	47	70
21	29.215	29.170	29.160	29.181	.295	.407	.456	73	63	88
22	29.195	29.174	29.135	29.168	.390	.462	.426	93	65	84
23	29.099	28.959	28.935	28.997	.446	.655	.564	77	81	79
24	28.870	29.038	29.038	28.982	.529	.621	.419	75	85	80
25	29.224	29.195	29.213	29.210	.218	.203	.169	76	55	54
26	29.191	29.157	29.167	29.171	.188	.189	.204	77	56	68
27	29.242	29.224	29.170	29.235	.219	.210	.222	87	58	83
28	29.085	28.969	28.961	29.003	.215	.279	.295	79	46	63
99	29.060	28.985	29.093	29.046	.302	.272	.308	82	44	69
30	29.099	29.035	29.069	29.067	.363	.362	.337	81	55	70
Sum	....	....	....	....	......	......	......	....	....	....
Mn's	....	....	....	29.033	.396	.420	.393	80	62	77
Av.	....	....	....	....	......	.403	......	....	73	....

OCTOBER, 1869.

THERMOMETER IN THE OPEN AIR.				RAIN AND SNOW.				
7 A. M.	2 P. M.	9 P. M.	Mean.	Time of beginning of rain or snow.	Time of ending of rain or snow.	Amount of rain or melted snow in gauge, in inches.	Depth of snow, in inches.	Day of month.
51.0	63.0	51.0	55.6	12½P. M.	....	....	....	1
43.5	53.0	49.5	52.0	....	1 A. M.	0.300	....	2
45.5	61.0	52.0	52.8	8½A. M	8 P. M.	0.240	....	3
40.0	49.0	47.0	45.3	....	....	....	....	4
40.0	55.5	47.0	47.5	....	....	....	....	5
46.0	65.0	55.0	55.3	....	....	....	....	6
50.5	69.5	62.0	60.6	....	....	....	....	7
54.5	71.0	60.0	61.8	8 P. M.	....	....	....	8
43.5	46.0	40.5	43.3	....	1½A. M.	0.120	....	9
37.0	56.0	47.0	46.6	....	....	....	....	10
38.0	52.5	45.5	45.5	....	....	....	....	11
35.0	45.5	38.0	39.5	....	....	....	....	12
33.5	45.5	50.0	43.0	....	....	....	....	13
39.5	44.0	34.5	39.3	....	....	....	....	14
33.0	42.0	33.0	36.0	....	....	....	....	15
36.0	52.0	43.0	43.6	....	....	....	....	16
35.5	45.0	39.0	40.0	....	....	....	....	17
31.5	35.5	32.0	33.0	....	....	....	....	18
30.0	33.5	30.0	31.1	....	....	....	....	19
24.5	40.5	33.5	32.5	....	....	....	....	20
31.0	45.0	37.0	37.6	....	....	....	....	21
27.0	36.5	28.0	30.5	....	....	....	....	22
23.0	29.0	22.5	24.8	....	....	....	....	23
19.0	26.0	21.5	22.1	....	....	....	....	24
16.5	35.5	21.5	24.5	*..........	....	....	....	25
21.5	26.0	21.0	22.8	....	....	....	....	26
21.5	40.0	39.0	33.5	....	....	....	....	27
35.0	56.5	42.0	44.5	....	....	....	....	28
37.0	34.0	30.0	33.6	†..........	....	....	....	29
26.0	31.5	26.5	28.0	....	....	....	....	30
25.0	45.0	39.5	36.5	....	....	....	....	31
......	......	......	......	....	....	0.660	....	Sum
......	......	......	37.7	....	....	....	....	M'n.
......	......	......	......	....	....	....	....	Av.

*Slight snow storm. †Snow storm.

OCTOBER, 1869—continued.

Day of Month.	CLOUDS.						WINDS.					
	7 A. M		2 P. M.		9 P. M.		7 A. M.		2 P. M.		9 P. M.	
	Amount of cloudiness.	Kind of clouds.	Amount of cloudiness.	Kind of clouds.	Amount of cloudiness.	Kind of clouds.	Direction.	Force.	Direction.	Force.	Direction.	Force.
1	2	Cu-st .	10	Nim . .	10	Nim . .	S. . . .	2	S.E. .	2	S.E. .	2
2	10	Cu-st .	5	Cir-cu.	0	. . . . . .	W . . .	3	N.W.	3	W . . .	2
3	10	Nim . .	5	Cir-cu	2	St. . . .	S.W .	2	S. . . .	3	N.W.	4
4	9	Cir-st.	9	Cir-cu.	0	. . . . .	N.W.	4	N.W.	3	N.W.	2
5	4	Cir . . .	4	Cir-cu.	0	. . . . .	N . . .	1	N . . .	1	N . . .	2
6	0	. . . . . .	5	Cir-cu	1	St. . . .	S . . .	2	S. . . .	3	S.W.	1
7	1	Cir. . .	5	Cir . . .	2	Cir-st.	S . . .	2	S. . . .	3	S.E. .	3
8	0	. . . . . .	2	Cir-cu.	9	Nim . .	S . . .	2	S.E. .	3	S W.	2
9	10	Cu-st .	8	Cu-st .	0	. . . . . .	S . . .	3	S.W.	3	S.W.	2
10	0	. . . . . .	4	Cir-cu.	0	. . . . . .	S.W.	2	S.W.	3	S.W.	3
11	8	Cir-st.	8	Cir-cu.	2	Cir-st.	W . . .	3	W . . .	3	W . . .	2
12	1	Cu . . .	1	Cir-cu.	0	. . . . . .	N.W.	3	N.W.	3	N.W.	1
13	9	Cir-st.	10	Cu-st .	8	Cir-cu.	S.W.	2	S.W.	3	S.W.	2
14	10	Nim . .	8	Cu-st .	9	Cu-st .	N.W.	3	N.W.	4	N.W.	4
15	1	Cir-st.	10	Cu-st .	0	. . . . . .	N.W.	2	N.W.	2	N.W.	2
16	8	Cir-st.	8	Cir. . .	0	. . . . . .	S.W.	3	S.W.	3	S.W.	3
17	0	. . . . . .	2	Cir-cu.	5	St. . . .	N.W.	2	N.W.	3	N.W.	3
18	4	Cir-st.	10	Cu-st .	9	Cir-st.	N.W.	3	N.W.	3	N.W.	3
19	9	Cu-st .	2	Cir-cu.	0	. . . . . .	N.W.	3	N.W.	3	N.W.	1
20	2	Cir-st.	1	Cir. . .	0	. . . . . .	S.W.	3	S.W.	4	S.W.	1
21	2	Cir-cu.	2	Cir. . .	8	Cir-cu	S.W.	2	S.W.	3	S.W.	3
22	8	Cir-cu.	8	Cir-cu.	1	Cir. . .	N.W.	3	N.W.	3	N.W.	2
23	5	Cir-st.	8	Cu . . .	0	. . . . . .	N.W.	2	N.W.	3	W . .	3
24	3	Cu. . .	10	Cu-st .	4	Cu . . .	W . . .	3	W . . .	3	W . .	3
25	0	. . . . . .	9	Cu-st .	3	St. . . .	S.W.	3	S. . . .	4	W . .	3
26	5	Cu-st .	1	Cir-cu.	8	St. . . .	W . . .	3	W . . .	3	W . .	3
27	8	Cu-st .	5	Cir. . .	5	St. . . .	S . . .	3	S.W.	4	S.W.	3
28	2	St. . . .	5	Cir. . .	2	Cu . . .	S.W.	2	W . . .	3	W . .	3
29	10	Nim . .	10	Cu-st .	10	Nim . .	N . . .	3	N.W.	3	N . . .	3
30	1	St. . . .	3	Cu. . .	1	St. . . .	N . . .	3	N. . .	3	N . . .	3
31	0	. . . . . .	0	. . . . . .	0	. . . . . .	S.W.	3	S. . . .	3	S . . .	2
Sum	. . . .	. . . . . .	. . . .	. . . . . .	. . . .	. . . . . .	. . . . . .	. . . .	. . . . . .	. . . .	. . . . . .	. . . .
M'ns	4.5	. . . . . .	5.6	. . . . . .	3	. . . . . .	. . . . . .	2.5	. . . . .	3	. . . . . .	2.2
Av .	. . . .	. . . . . .	4.3	. . . . . .	. . . .	. . . . . .	. . . . . .	. . . .	. . . . . .	2.5	. . . . . .	. . . .

OCTOBER, 1869—continued.

BAROMETER.				FORCE OF PRESSURE OF VAPOR, IN INCHES.			RELATIVE HUMIDITY or PER CENT OF SATURATION.			Day of Month.
BAROMEMER HEIGHT REDUCED TO FREEZING POINT.										
7 A. M.	2 P. M.	9 P. M.	Mean.	7 A. M.	2 P. M.	9 P. M.	7 A. M.	2 P. M.	9 P. M.	
29.222	29.211	29.235	29.222	.405	.362	.224	94	55	79	1
28.964	28.969	29.032	28.981	.224	.295	192	79	73	54	2
28.937	28.753	28.781	28.823	.245	.297	.308	80	55	79	3
28.981	28.933	29.065	28.986	.203	.199	.225	82	57	70	4
29.124	29.037	28.977	29.046	.225	.262	.249	91	59	77	5
28.900	28.800	28.810	28.836	.362	.449	.421	84	100	74	6
28.846	28.828	28.830	28.834	.302	.423	.340	82	59	61	7
28.888	28.801	28.762	28.817	.383	.340	.426	90	45	82	8
28.829	28.871	28.918	28.872	.248	.215	.197	88	69	78	9
28.845	28.843	28.791	28.826	.157	.255	.156	71	77	48	10
28.860	28.776	28.780	28.805	.165	.153	.176	72	39	57	11
28.874	28.849	28.902	28.875	.142	.111	.103	70	36	45	12
28.845	28.589	28.570	28.668	.144	.176	.186	75	57	51	13
28.609	28.800	28.941	28.783	.188	.151	169	77	52	84	14
28.991	28.952	28.962	28.968	.150	.134	.131	80	50	70	15
28.883	28.755	28.827	28.821	.149	.208	.164	71	53	59	16
29 004	28.994	29.083	29.027	.136	.160	.173	65	53	73	17
29.170	29.186	29.204	29.186	.130	.121	.125	74	58	69	18
29.242	29.196	29.115	29.184	.130	.182	.130	78	95	78	19
29.006	28.735	28.743	28.828	.123	.091	.126	93	36	65	20
28.716	28.752	28.879	28.755	.136	.074	.157	78	25	71	21
28.990	28.954	28.959	28 968	.129	.184	.117	88	85	76	22
28.930	28.924	29.023	28.959	.106	.093	.079	86	63	65	23
29.142	29.127	29.261	29.173	.087	.088	.090	84	62	78	24
29.276	29.132	29.131	29.179	.053	.121	.074	58	58	64	25
29.260	29.320	29.360	29.313	.107	.105	.064	93	75	56	26
29.204	28.864	28.787	28.951	.107	.077	.110	93	31	46	27
28.597	28.617	28 782	28.665	.129	.124	.177	61	27	66	28
28.890	29.082	29.242	29.070	.178	.188	.111	81	71	67	29
29.361	29.360	29.321	29.347	.105	.076	.117	75	43	82	30
29.204	28 967	28.957	29.041	.100	.117	.124	74	39	51	31
....	....	....	....	....	....	....	....	....	....	Sum
....	....	....	28.954	.173	.186	.175	79	53	63	M'ns
....	....	....	....	....	.178	....	....	65	....	Av.

SUMMARY, 1869.

MONTHS.	THERMOMETER IN OPEN AIR.			BAROMETER HEIGHT REDUCED TO FREEZING POINT.			RAIN AND SNOW.		FORCE OR PRESSURE OF VAPOR, IN INCHES.			RELATIVE HUMIDITY OR FRACTION OF SATURATION.			AMOUNT OF CLOUDINESS.	PERCENTAGE OF WINDS.			
	Max.	Min.	Mean.	Max.	Min.	Mean.	Am't rain & melt'd snow in gauge, in inches.	Depth of snow, in inches.	Max.	Min.	Mean.	Max.	Min.	Mean.		S. W. & W.	N. W. & N.	N. E. & E.	S. E. & S.
January....	42.0	-11.0	23.7	29.559	28.206	28.961	* 2.690	16.25	.254	.027	.124	100	63	94	4.8	53	25	16	6
February ..	50.5	-1.0	22.9	29.464	28.453	28.932	2.350	8.00	.301	.042	.123	100	57	89	6.2	28	44	16	12
March......	59.0	-8.0	25.5	29.659	28.162	28.947	0.490	5.00	.433	.001	.143	100	2	85	5.0	28	42	16	14
April	63.0	12.5	36.7	29.467	28.371	28.868	2.720	6.00	.462	.069	.236	100	28	75	5.8	32	27	27	14
May	81.5	35.0	54.4	29.259	28.392	28.830	4.900	....	.812	.165	.376	100	31	73	5.6	26	26	39	9
June..	78.5	48.0	62.5	29.199	28.240	28.868	6.240	....	.838	.229	.517	100	41	74	4.6	59	29	4	8
July........	80.0	59.0	69.5	29.689	28.242	28.951	3.630	....	1.029	.425	.635	97	54	73	3.8	53	27	4	16
August	89.0	54.0	66.9	29.417	28.385	29.014	5.920	....	1.270	.359	.642	100	30	79	4.8	20	31	32	17
September.	81.0	39.0	61.8	29.400	28.798	29.033	2.680	....	.745	.169	.403	94	40	73	4.6	29	22	5	44
October....	71.0	16.5	37.7	29 361	28.570	28.954	0.660	....	.429	.053	.178	100	25	65	4.3	43	39	..	18

SECRETARY'S REPORT.

MADISON, November 1, 1869.

General C. S. HAMILTON,

President of the Regents of the University of Wisconsin:

SIR:—I have the honor to submit the following statement of the funds pertaining to the State University, exhibiting the receipts and disbursements for the year ending September 30, 1869:

UNIVERSITY FUND.

This fund consists of the proceeds of the sales of lands granted by Congress for the support of a University,

RECEIPTS.

Sales of land	$949 82	
Dues on certificates	3,022 00	
Loans, payments on mortgages	300 00	
Penalties on forfeitures	40 40	
Taxes	77	
Dane county bonds redeemed	5,000 00	
Total receipts	$9,312 99	

DISBURSEMENTS.

Invested in State bonds		$10,000 00
Refunded on account of overpayment		230 95
	$9,312 99	$10,230 95
Balance, September 30, 1868	1,498 14	
Balance, September 30, 1869		580 18
	$10,811 13	$10,811 13

The amount of this fund which was productive at the end of the fiscal year ending September 30, 1868 and 1869, respectively, was as follows :

	1868.	1869.
Amount due on certificates of sales	$68,341 14	$66,906 14
Amount due on mortgages	6,092 00	5,792 00
Certificates of indebtedness	101,000 00	111,000 00
Dane county bonds	24,000 00	19,000 00
Total productive fund	$199,433 14	$202,698 14

Showing an increase in the productive fund during the last year of $3,265.

AGRICULTURAL COLLEGE FUND.

This fund consists of the proceeds of the sales of 240,000 acres of lands granted by Congress to the state for the support of an institution of learning, where shall be taught the principles of agriculture and the arts. The interest on the productive fund forms the income.

RECEIPTS.

Sales of land	$25,221 83	....
Dues on certificates	783 00	....
Penalties on forfeitures	13 60	....
	$26,017 98	....

DISBURSEMENTS.

Invested in State bonds	....	$3,000 00
Refunded for overpayment	....	2 92
	$26,017 98	$3,002 92
Balance September 30, 1868	513 88	....
Balance September 30, 1869	....	23,528 84
	$26,531 76	$26,531 76

The amount of productive fund September 30, 1868 and 1869, respectively, was as follows :

	1868.	1869.
Dues on certificates of sale	$14,488 40	$75,526 40
Dane county bonds	11,000 00	11,000 00
	$25,488 40	$83,526 40

Showing an increase of the productive fund of $58,038 00.

The amount and value of land remaining unsold at the close of the last fiscal year, as near as can be ascertained, is as follows:

	Acres.	Value.
University fund	$11,738	$29,040 61
Agricultural College fund	152,387	190,484 00
Total	$164,120	$219,524 61

The changes in the first two items of the Productive University Fund, as stated above, have been produced as follows:

Amount due on certificates of sale, Sept. 30, 1868		$68,341 14
Decreased by payments	$3,022 00	....
Decreased by forfeitures	2,081 00	....
		5,103 00
		$63,238 14
Increased by new certificates of sale		3,668 00
Amount due on certificates of sale Sept. 30, 1869		$66,906 14

Amount due on mortgages Sept 30, 1868	$6,092 00
Decreased by payments	300 00
Amount due on mortgages Sept. 30, 1869	$5,792 00

The changes in the first item of the productive Agricultural College Fund, as stated above, has been produced as follows:

Amount due on certificates of sale Sept. 30, 1868		$14,488 40
Decreased by payments	$783 00	....
Decreased by forfeitures	356 00	....
		1,139 00
		$13,349 40
Increased by new certificates of sale		59,177 00
Amount due on certificates of sale Sept. 30, 1869		$72,526 40

UNIVERSITY FUND INCOME.

RECEIPTS.

Interest on principal due on lands	$5,046 32	....
Interest on certificates of indebtedness	7,886 66	....
Interest on Dane county bonds	1,550 06	....
Students for tuition and room rent	7,639 00	....
Students for fuel sold them	488 00	....
Students for chemicals sold them	11 23	....
Students for repairs (damages)	8 00	....
Boarding department for advances	80 00	....
Appropriation from General Fund—chap. 82 G. L. of 1867	7,303 76	....
	$30,013 03	

DISBURSEMENTS.

Salaries	....	**$20,193 50**
Expenses of Regents	....	**409 50**
Insurance	....	**494 87**
Repairs and improvements	....	**2,948 10**
Incidental expenses	....	**2,238 25**
Fuel	....	**871 70**
Printing and advertising	....	**249 70**
Library	....	**49 12**
Furniture	....	**29 00**
Philosophical apparatus	....	**825 00**
Room rent	....	**181 57**
Cabinet and natural history	....	**4 00**
Refunded for overpayment of interest	....	**142 51**
	$30,018 03	**$28,086 82**
Balance, September 30, 1868	**2,148 43**	....
Balance, September 30, 1869	....	**4,074 64**
	$32,161 46	**$32,161 46**

The accounts audited and paid from the income of the University Fund were, in detail, as follows:

SALARIES OF PRESIDENT AND INSTRUCTURAL FORCE.

P. A. Chadbourne, President	$3,000 00	....
J. W. Sterling, Vice President	1,800 00	....
J. B. Parkinson....professor	1,800 00	....
S. H. Carpenter........do	1,458 50	....
Wm. F. Allen...........do	1,800 00	....
J. B. Feuling...........do	1,350 00	....
W. W. Daniells.........do	1,800 00	....
J. E. Davies............do	1,800 00	....
A. E. Verrill...........do	300 00	....
J. H. Carpenter.........do	1,525 00	....
William F. Vilas........do	400 00	....
A. H. Thompson.....instructor	900 00	....
Isaac S. Leavitt........do	200 00	....
A. H. Southworth.......do	50 00	....
R. B. Anderson.........do	150 00	....
D. B. Frankenberger....do	150 00	....
Miss E. Earle, Preceptress	600 00	....
Miss C. L. Ware, Assistant Preceptress	600 00	....
Clara D. Bewick, Instructress	100 00	....
Lizzie S. Spencer ...do	100 00	....
E. S. Carr, balance due him as Professor	40 00	....
T. N. Haskell, Professor	270 00	....
		$20,193 50

INSURANCE.

S. R. Jenckes... agent	24 00	....
O. Ainsworth .....do	49 00	....
C. H. Vilas........do	100 00	....
M. D. Miller.......do	137 50	....
Main & Spooner....do	184 37	....
		$494 87

EXPENSES OF REGENTS.

Edward Salomon	$16 95	
Angus Cameron	31 25	
C. S. Hamilton	43 10	
R. R. Sanderson	6 50	
F. O. Thorpe	28 75	
J. C. Cover	46 80	
Aug. L. Smith	22 65	
B. R. Hinckley	87 50	
Samuel Fallows	38 00	
J. S. Bugh	70 00	
A. Van Wyck	18 00	
		$409 50

REPAIRS.

W. Ramsay & Co., hardware	$296 35	
James McDowell, carpenter work	742 44	
E. Sharp & Co., plastering	818 10	
Sexton & Dowling, lumber	96 46	
Andrew Sexton lumber	16 36	
W P Towers, blackboard	2 50	
H. C. Ainsworth, painting	46 25	
Pollard, Nelson & Co., painting	710 25	
Wm. A. Mears, lumber	80 66	
A. H. Van Norstrand, paints and oil	568 63	
Wm. T. Fish, labor and materials	70 00	
		$2,948 10

INCIDENTAL EXPENSES.

Edgar Hunt, carpenter	$63 75	
L. Flanagan, ...labor	129 73	
N. Peabody, ...do	66 81	
Nicholas Kelley......do	109 81	
James Burrowbridge, do	7 50	
Patrick Walsh, janitor, services	505 00	
......do. .... cleaning house	73 70	
James McDowell, jr., carpenter	13 34	
......do........... janitor, services	60 00	
W. J. Park & Co. stationery	50 50	
P. A Chadbourne, bills paid	235 95	
J. W. Sumner & Co., merchandise	86 22	
J. H. Luhme & Co., chemicals	413 45	
Wm. Brush, traveling expenses	26 50	
A. B. Peabody, ...visitor	53 33	
H. H. Gray, ...do	30 00	
John S. Dean, salary as secretary	133 33	
S. Klauber & Co., ribbon for diplomas	4 00	
L. P. Drake, surveying	11 87	
Madison Band, music	60 00	
A. H. Van Norstrand, Merchandise	71 97	
A. Kentzler, livery	8 00	
Riley & Thompson, livery	5 00	
J. H Carpenter, stationery, postage, &c	19 00	
		$2,238 25

FUEL.

James Monks, wood	$10 50	
B. Fitzpatrick, cutting and piling	12 82	
M. Flanagan, ...do	6 19	
George Keenan, wood	842 19	
		$871 70

PRINTING AND ADVERTISING.

Atwood & Rublee	$93 00	
Advertising commencement of terms	156 70	
		$249 70

LIBRARY.

P. A. Chadbourne, purchases by him	$10 10	
Joel Monsell, Dean's Civilization	9 50	
Silliman's Journal	6 00	
F. W. Chuistern, agricultural works	23 52	
		$49 12

FURNITURE.

J. M. Haight	$17 00	
J. M. Haight	12 00	
		$29 00

PHILOSOPHICAL APPARATUS.

J. H. Luhme & Co		$325 00

ROOM RENT.

Rent paid for rooms for students outside of University		$181 57

CABINET OF NATURAL HISTORY.

Freight on box of minerals		$4 00

REFUNDED.

Refunded for overpayment of interest		$142 51
Total disbursements		$28,086 82

AGRICULTURAL COLLEGE FUND INCOME.

RECEIPTS.

Interest on principal due on lands	$2,636 77	
Interest on Dane county bonds	770 00	
Interest on certificates of indebtedness	245 00	
	$3,651 77	

DISBURSEMENTS.

Refunded for overpayment of interest		$0 39
Transferred to Experimental Farm Fund		2,333 05
	$3,651 77	$2,333 44
Balance, September 30, 1868	2,864 59	
Balance, September 30, 1869		4,182 92
	$6,516 36	$6,516 36

EXPERIMENTAL FARM FUND.

This fund is composed of the proceeds of the sale of Dane county bonds to the amount of forty thousand dollars, which, under the provisions of chapter 114, laws of 1866, were to be placed in the hands of the Regents of the University, for the purpose of purchasing a farm in connection with the College of Agriculture. These bonds were all delivered, and all invested in the University and Agricultural College funds, excepting five thousand dollars, which were redeemed by Dane county, and the money paid into the fund.

RECEIPTS.

Sale of lots	$100 00	....
House rent	37 50	....
Sale of farm products	122 50	....
Transfer from Agricultural College fund income, to balance account	2,333 05	....
	$2,593 05	....

DISBURSEMENTS.

Buildings and improvements	....	$2,743 20
Machinery and utensils	....	371 25
Labor	....	1,360 47
Lumber	....	1,932 80
Incidentals	....	646 00
	$2,593 05	$7,053 72
Balance Sept. 30, 1868	4,460 67	....
	$7,053 72	$7,053 72

The following is a detailed statement of the accounts audited for the Experimental Farm during the last fiscal year:

BUILDINGS.

Sorenson & Frederickson, contractors	$2,496 25	....
W. T. Fish, labor	100 95	....
E. Sharp & Co., plastering	96 00	....
A. Kutzbock, plans and specifications	50 00	....
		$2,743 20

MACHINERY AND UTENSILS.

S. L. Sheldon & Bro., subsoil plow	$22 00	....
Geo. Ludington, bob-sleighs	55 00	....
B. R. Hinckley, cash paid for steel plow	25 00	....
Thos Chynoweth, harness	27 75	....
M. E. Fuller & Co., machinery	141 50	....
B R. Hinckley, cash paid for Democrat wagon	100 00	....
		$371 25

LUMBER.

Frank & Burgess	$1,750 89	
Frank & Burgess	84 36	
Wm. A. Mears	97 55	
		$1,932 80

LABOR.

John L. Lewis, farmer	$656 00	
L. Flanagan, labor	75 50	
N. Peabody ..do	18 50	
Edward Deards, carpenter	21 25	
G. Kelly...........labor	57 50	
James Burrowbridge.do	23 63	
M. Leary............do	118 75	
F. Yungbluth........do	140 90	
Students............do	100 09	
James Welch........do	69 23	
H. Scheffer..........do	15 00	
Charles Cooper......do.	2 62	
L. B. Drake, surveying and platting	61 50	
		$1,360 47

INCIDENTALS.

W. Ramsay & Co., hardware	$86 02	
P. A. Chadbourne, paid for trees, oats, &c	117 26	
N. B. Cramton, blacksmithing	42 95	
M. M. Dorn & Co	3 50	
Thomas Reagan, lead pipe	22 63	
Charles Hammer, saddlery	5 60	
Freight and express on trees	12 20	
Timo. Kinney, oats	32 50	
Robert Douglas & Son, trees	67 00	
Steenlsand & Baker, seed corn	63	
P. P. Purcell, manure and labor	34 87	
A. G. Tuttle, trees	120 00	
W. C. Colby, oats	29 90	
Stevens & Sons, seeds	20 94	
M. C. Lueens, grape vines	50 00	
		$646 00
Total disbursements		$7,053 72

RECAPITULATION.

The balance in the hands of the Treasurer of the Regents of the University belonging to the income of the several funds, on the 30th day of September, 1868, was $9,473.69.

The receipts and disbursements, including such balance, for the fiscal year ending September 30, 1869, were as follows:

RECEIPTS.

Balance on hand September 30, 1868..........	....	$9,473 69
Interest on productive funds..................	$18,134 81	....
Appropriation by State......................	7,303 76	....
Tuition fees and room rent...................	7,639 00	....
From students for fuel, chemicals and repairs...	507 23	....
Boarding department, return from advances made	80 00	....
Sale of lots, farm products and rent of brick house...........................	260 00	....
Total receipts..........................	....	$33,924 80
Total receipts, including balances.......	....	$43,398 49

DISBURSEMENTS.

On account University Fund Income, as per detailed statement.......	$28,056 82	....
On account Agricultural College Fund Income, interest refunded........................	39	....
On account Experimental Farm, as per detailed statement.............................	7,053 72	....
Total expenditures.....................	....	$35,140 98
Balance on hand September 30, 1869..........	....	$8,257 56

The available income for the fiscal year ending September 30, 1870, may be estimated as follows:

Interest on productive funds.................................	$20,000 00
Appropriation by State....................................	7,303 76
Tuition fees and rents......................................	7,000 00
	$34,303 76

Very respectfully, your obedient servant,

JOHN S. DEAN,

Secretary of Regents of the University.

ANNUAL REPORT

OF THE

BOARD OF REGENTS

OF THE

UNIVERSITY OF WISCONSIN,

For the Fiscal Year ending September 30, 1870.

BOARD OF REGENTS.

STATE SUPERINTENDENT OF PUBLIC INSTRUCTION.

Ex-officio Regent.

Terms expire first Monday in February, 1871.

3d Congressional District	H. H. GRAY	Darlington.
5th .....do........do	AUG. L. SMITH	Appleton.
1st .....do........do	B. R. HINCKLEY	Oconomowoc.
1st .....do........do	SAMUEL FALLOWS	Milwaukee.
5th .....do........do	JACOB S. BUGH	Wautoma.

Terms expire first Monday in February, 1872.

1st Congressional District	H. K. SMITH	Milwaukee.
6th .....do........do	ANGUS CAMERON	La Crosse.
4th .....do........do	C. S. HAMILTON	Fond du Lac.
2d .....do........do	J. C. GREGORY	Madison.
2d .....do........do	N. B. VAN SLYKE	Madison.

Terms expire first Monday in February, 1873.

2d Congressional District	R. B. SANDERSON	Madison.
4th .....do........do	F. O. THORPE	West Bend.
1st .....do........do	J. R. BRIGHAM	Milwaukee.
6th .....do........do	H. D. BARRON	Barron.

OFFICERS.

C. S. HAMILTON,

PRESIDENT.

N. B. Van Slyke, R. B. Sanderson, J. C. Gregory,

EXECUTIVE COMMITTEE.

JOHN S. DEAN,

SECRETARY.

HENRY BÆTZ, State Treasurer,

EX-OFFICIO TREASURER.

ANNUAL REPORT.

To his Excellency, LUCIUS FAIRCHILD,
Governor of Wisconsin:

I have the honor to submit herewith, the annual report, required by law, of the condition and progress of the University of Wisconsin, during the year ending September 30, 1870.

The Faculty and instructional force are organized as follows:

JOHN W. STERLING, LL. D.,
Vice President and Professor of Natural Philosophy and Astronomy.

JOHN B. PARKINSON, A. M.,
Professor of Mathematics.

STEPHEN H. CARPENTER, A. M.,
Professor of Logic, Rhetoric and English Literature.

WILLIAM F. ALLEN, A. M.,
Professor of Ancient Languages and History.

JOHN B. FEULING, PH. D.,
Professor of Modern Languages and Comparative Philology.

COL. WALTER S. FRANKLIN, S. B.,
Professor of Military Science and Civil Engineering.

W. W. DANIELLS, M. S.,
Professor of Agriculture and Analytical Chemistry.

JOHN E. DAVIES, M. D.,
Professor of Natural History and Chemistry.

ADDISON E. VERRILL, A. M.,
Professor of Comparative Anatomy and Entomology.

R. D. IRVING, A. M., E. M.,
Professor of Geology, Mining and Metallurgy.

HON. L. S. DIXON, LL. D.,
Chief Justice of the Supreme Court of Wisconsin.,
Professor of Law.

Hon. ORSAMUS COLE, LL. D.,
Associate Justice of the Supreme Court of Wisconsin.,
Professor of Law.

Hon. BYRON PAINE, LL. D.,
Associate Justice of the Supreme Court of Wisconsin.,
Professor of Law.

Hon. H. S. ORTON, LL. D.,
Dean of Law Faculty.

J. H. CARPENTER, ESQ.,
Professor of Law.

WM. F. VILAS, LL. B.,
Professor of Law.

R. B. ANDERSON, A. M.,
Instructor in Languages.

D. B. FRANKENBURGER, Ph. B.,
Instructor.

Miss CLARISSA L. WARE,
Preceptress.

Miss CLARA D. BEWICK, Ph. B.,
Assistant.

Miss LIZZIE S. SPENCER, Ph. B.,
Assistant.

Miss FRANCES BROWN,
Teacher of Music.

Miss LOUISA BREWSTER,
Teacher of Drawing and Painting.

I. COLLEGE OF ARTS.

Candidates for admission to the College of Arts are examined in English Grammar, Geography, in Mental and Written Arithmetic, and in Algebra to Quadratic Equations.

Candidates for advanced standing must, in addition to the studies named above, pass examination in those previously pursued by the class which they propose to enter, or in studies equivalent to them.

The following is the course of instruction in this department:

FRESHMAN YEAR.

FIRST TERM.

Mathematics.....	Elementary Algebra completed. Plane Geometry.
Language........	Sentential Analysis.
History	United States.
Lectures.........	Health and Methods of Study.

Elective.........	French, Latin, Greek and Scandinavian Languages.

SECOND TERM.

Mathematics......	Higher Algebra begun.—Loomis.
Language........	Mulligan's Structure of the English Language.
Geography	Physical.
Natural History..	Lectures.

Elective..........	French, Latin, Greek and Scandinavian Languages. Book Keeping.

THIRD TERM.

Mathematics.....	Solid Geometry.
Language	Craik's English of Shakespeare.
Science	Elements of Natural Philosophy. Physiology.
Elective	French, Latin, Greek and Scandinavian Languages.

Themes and Declamations weekly during the year.

SOPHOMORE YEAR.

FIRST TERM.

Mathematics.....	Higher Algebra completed—Loomis.
German..........	Comfort's German Course.
Natural History..	Botany.
History..........	Roman Empire.
Elective Studies..	Practical Botany and Agriculture, French and Latin.

SECOND TERM.

Mathematics.....	Conic Sections, Plane Trigonometry and Mensuration—Loomis.
German	Comfort's Course.
Science	Agriculture and Meteorology.
History..........	Mediæval—Student's France.
Elective Studies..	History of Useful Plants, Physical Geography, Climatology, French and Latin.

THIRD TERM.

Mathematics......	Spherical Trigonometry, Surveying and Navigation—Loomis.
German	Select Prose and Poetry.
Natural History .	Botanical Analysis—Gray's Manual.
History	Modern—Student's France.

Elective Studies	Horticulture, French, Latin.

Themes and Declamations weekly during the year.

JUNIOR YEAR.

FIRST TERM.

Mathematics	Analytical Geometry—Loomis.
Rhetoric	Day's Art of Discourse.
Chemistry	Youman's,
Natural History	Mineralogy—Dana.
Human Anatomy	Lectures.

Elective Studies	Laboratory Practice, *Qualitative Analysis, Blowpipe Analysis.*

SECOND TERM.

Physics	Mechanics—Peck. Lectures.
Civil Polity	Political Economy.
Chemistry	Organic and Applied.
Natural History	Zoology begun—Agassiz.

Elective Studies	Differential and Integral Calculus, Laboratory Practice, *Quantitative Analysis.*
History	England—Student's Hume.

THIRD TERM.

Physics	General Physics--Lectures.
Civil Polity	International Law, Constitution of the United States.
Natural History	Zoology completed. General Physiology.

Elective Studies	Natural History of Domestic Animals, Entomology.

Themes and Declamations weekly during the year.

SENIOR YEAR.

FIRST TERM.

Astronomy	White, and Lectures.
Ment. Philosophy	Haven, and Lectures.
Eng. Literature	Shaw's Complete Manual.
Aesthetics	Bascom.
Elective Studies	Examination of Soils, Forestry.

SECOND TERM.

Logic	Whateley.
Rhetoric	Bascom.
MoralPhilosophy	Hopkins, and Lectures.
Eng. Literature	Lectures.
Natural History	Geology and Mining.
Elective Studies	Modern Languages, Chemical Analysis, Determinative Mineralogy.

THIRD TERM.

Natural Theology	Chadbourne.
Evidences	Lectures.
History	Guizot's History of Civilization.
	General Review.

Critical Essays, Declamations, and Forensic Disputations, weekly during the year.

DEPARTMENT OF MILITARY SCIENCE.

MILITARY EXERCISES AND COURSE OF STUDY.

All students in the Sophomore and Freshman classes, and those of other classes who may so elect, are organized into a Battalion of two or more companies, and are required to drill three hours each week in term time.

I.—The course of study will comprise Infantry, Cavalry, Field and Garrison Artillery, Tactics, Advanced Guard and Out Post, etc. Ordnance and Gunnery, practice of Courts Martial and Army Regulations.

II.—*Freshman year.*

FIRST TERM.

Practical instruction in the School of the Soldier, Company and Skirmish Drill.

SECOND TERM.

Practical instruction in the School of the Soldier, and Bayonet Exercise.

THIRD TERM.

Practical instruction in the school of the Soldier, Company and Battalion.

III.—*Sophomore year.*

FIRST TERM.

Infantry, Cavalry and Field Artillery Tactics.

SECOND TERM.

Instruction in Ordnance and Gunnery, Army Regulations and Courts Martial.

THIRD TERM.

Practical instruction in the School of the Company and Battalion; Duty as Officer of the Guard, etc.

The Board of Regents at its annual sessions will forward to the Governor of the State, the names of five students who have gone through the above course, standing first on the list according to merit in their studies and military deportment, who shall be recommended to the War Department as proper persons to receive the appointment of Second Lieutenants in the regular army.

DEPARTMENT OF CIVIL ENGINEERING.

ORGANIZATION.

This Department was established by the Board of Regents at its last annual meeting. It is in charge of Col. Walter S. **Franklin**, a graduate of the Harvard Scientific School.

The object of this department is to give its students such instruction in the theory and practice of Civil Engineering as to fit them, after a moderate amount of practice in the field, to fill the higher positions in the profession.

TERMS OF ADMISSION.

The requirements for commencing the Engineering Course are Arithmetic, Algebra, Plane and Solid Geometry and Plane Trigonometry.

COURSE OF INSTRUCTION.

JUNIOR YEAR.

First Term.

Descriptive Geometry.
Geometrical Drawing.

Second Term.

Descriptive Geometry finished.
Shades and Shadows.
Perspective.
Geometrical Drawing.
Theoretic Mechanics.

Third Term.

Practical Mechanics.

SENIOR YEAR.

First Term.

Mahan's Civil Engineering and Drawing.

Second Term.

Descriptive Geometry applied to Stone Cutting.

Third Term.

Railroad Engineering.
Use of Instruments.

The above Course of Instruction is intended to give a mere outline of the studies pursued. Students are expected to select from the other departments, under the direction of the Professor in charge, such studies as will furnish them full employment.

Students are permitted to take any part of this course for which they are fitted.

COURSE OF STUDY IN THE DEPARTMENT OF AGRICULTURE.

FIRST YEAR.

First Term.

Botany.—Structural Botany, including microscopic examination of tissues and other minute structures. Physiological Botany, including the germination and growth of plants. Systematic Botany, or classification of plants, including a discussion of the general principles of classification in the different departments of Natural History. The limitations of species and origin of varieties, with exercises in Botonical analysis.

Second Term.

Practical Agriculture.—Location of farm. Division into fields. Arrangement and planning of farm buildings. Farm implements. General principles of tillage. Principles of Drainage. Laying out and construction of drains. Methods of seeding. Harvesting of crops.

Meteorology.—Dews, Frosts, Fogs, Clouds, Rain, Hail, Snow, Winds, and local causes affecting climate, as proximity to mountain chains, to forests, or to bodies of water. Effect produced by the removal of forests, or by planting screens of timber. Meteorological instruments, their methods of use and advantages to the agriculturist.

Third Term.

Practical Botany.—Botanical characteristics and geographical distribution of the natural orders, with their relative importance. The genera and species having agricultural value, those having commercial or medical value, those having ornamental value, and those which are noxious or detrimental—as weeds or poisonous plants.

Horticulture.—Hot beds, their construction and use. Methods of propagation of plants, by layers, by cuttings, by budding or grafting, &c. Transplanting. Varieties of small fruits, and the best means of cultivating them General management of nurseries. Production of new varieties. Landscape gardening.

SECOND YEAR.

First Term.

Chemistry.—The forces, Heat, Light, Electricity and Magnetism. Chemical affinity and the laws of chemical combination. the elements, their history, properties, combinations and uses. Applications of Chemistry to the arts and manufactures. Labaratory practice will be begun as soon as the student has become sufficiently advanced, taking up the special reactions of the elements, and the laws of chemical decomposition and precipitation.

Second Term.

Zoology.—Principles of classification. Descriptive Zoology, comprising the systematic arrangement of animals in accordance with their natural affinities, into classes, orders, families, &c. Natural history of domestic animals.

Organic Chemistry.—Composition of organic bodies and their special characteristics. Chemistry of germination, of nutrition, of vegetable growth, of decomposition, of fermentation, of saponification.

Analytical Chemistry.—Including general analysis, analysis of Minerals, Blowpipe analysis, analysis of soils, manures and ashes of plants. Volumetric analysis and its applications to acidimetry and alkalimetry,

Third Term.

Practical Agriculture.—General principles of farm economy. Care and feeding of Stock. Manures, animal, vegetable and mineral, their management and mode of application. Preparation of the soil for particular crops. Cultivation of crops. Management of grass lands. Improvement of soils by physical means, as draining, subsoiling, &c. Conducting experiments. Industrial Statistics.

Zoology.—General Physiology, Comparative Anatomy, and Embryology. Entomology, including classification of insects. Habits of noxious species and best means of checking their ravages. Habits of beneficial species.

THIRD YEAR.

First Term.

Forestry.—Planting and management of Forest Trees. Soils adapted to their growth. Value of different kinds of trees for fuel, building and other purposes.

Geology.—Dynamical and descriptive. Origin of soils. Building materials. Coal and metals.

Second Term.

Agricultural Chemistry.—Composition of soils. The relations of air and moisture to vegetable growth. Connection of light, heat and electricity with growth of plants. Chemical changes attending vegetable growth. Chemistry of the various processes of the farm, as plowing, fallowing, draining, &c. Preparation, preservation and composting of manures. Artificial manures. Methods of improving soils by chemical means, by mineral manures, by vegetable manures, by animal manures. Chemical composition of the various crops. Chemistry of the dairy.

Third Term.

ANIMAL HUSBANDRY.—Breeds of domestic animals, their characteristics, and adaptation to particular purposes. Principles of stock breeding. Veterinary surgery and medicine.

HISTORY OF AGRICULTURAL EDUCATION.

NOTE.—It will be noticed that the same branch sometimes occurs in different parts of the course. In some cases this has been found necessary in properly arranging the studies into terms. In other cases this necessity arises from the different methods in which the same subject will be discussed; these methods belonging to different departments of instruction, some of them adapted to students in the earlier, and others to those in the later part of the course.

II. COLLEGE OF LETTERS.

Candidates for admission to the Freshman Class are examined in the studies of the Preparatory Course, or their equivalents. It is desired that Latin and Greek be pronounced with the continental sound of the vowels, and that Greek be pronounced according to accent. Students must show sufficient thoroughness in these studies to make it apparent that they can successfully pursue all the studies of the Freshman year.

Candidates for advanced standing must, in addition to the studies named above, pass examination in those previously pursued by the class which they propose to enter, or in those equivalent to them.

Course of Instruction.

FRESHMAN CLASS.

FIRST TERM.

Latin	Livy—Lincoln.
Greek	Xenophon or some other Greek historian.
History	United States—Eliot.
Lectures	Laws of Health and Methods of Study.
Mathematics	Plane Geometry.
Elective	French.

SECOND TERM.

Mathematics	Higher Algebra begun—Loomis.
Latin	Cicero de Senectute and de Amicitia.
Greek	Xenophon's Memorabilia—Robbins.
History	Greece.
Elective	French.

THIRD TERM.

Mathematics	Solid Geometry.
Latin	Horace—Odes and Satires.
Greek	Memorabilia continued.
History	Rome.
Elective	French.

Themes and Declamations during the year. Latin and Greek Composition through the year.

SOPHOMORE YEAR.

FIRST TERM.

Mathematics	Higher Algebra completed—Loomis.
Latin	Horace.
Greek	Homer—Iliad.
German	Comfort's Course.
Natural History	Botany.
History	Roman Empire—Lectures.

SECOND TERM.

Mathematics	Conic Sections, Plane Trigonometry and Mensuration—Loomis.
Latin	Histories of Tacitus—Tyler.
Greek	Æschylus Prometheus—Woolsey.
German	Comfort's Course.
History	Mediæval—Student's France.

THIRD TERM.

Mathematics	Spherical Trigonometry, Surveying and Navigation—Loomis.
Latin	Trinummus of Plautus—Harrington.
Greek	Demosthenes — Olynthiacs and Phillippics—Champlin.
German	Select Prose and Poetry.
Natural History	Botanical Analysis—Gray's Manual.
History	Modern—Student's France.

Themes and Declamations weekly during the year. Latin composition through the year.

JUNIOR YEAR.

FIRST TERM.

Rhetoric.........	Day's Art of Discourse.
Mathematics.....	Analytical Geometry.
Chemistry.......	Youman's and Lectures.
Natural History..	Mineralogy—Dana.
Human Anatomy..	Lectures.

SECOND TERM.

Physics.........	Mechanics—Snell and Lectures.
Civil Polity.....	Political Economy.
Chemistry.......	Organic and applied.
Natural History..	Zoology begun—Agassiz.
History.........	England—Student's Hume.

Elective........	Calculus.

THIRD TERM.

Physics........	General Physics, with Lectures.
Civil Polity.....	International Law, Constitution of the United States.
Natural History..	Zoology completed. General Physiology.

Themes and Declamations weekly during the year.

SENIOR YEAR.

FIRST TERM.

Astronomy......	White, and Lectures.
Mental Philosophy	Haven, and Lectures.
Eng. Literature..	Shaw's Complete Manual.
Aesthetics.......	Bascom.

SECOND TERM.

Logic	Whateley.
Rhetoric	Bascom.
Moral Philosophy	Hopkins, and Lectures.
Eng. Literature ..	Lectures.
Nat. History	Geology and Mining.

THIRD TERM.

Natural Theology.	Chadbourne.
Evidences	Lectures.
History	Guizot's History of Civilization.
	General Review.

Critical Essays, Declamations, and Disputations, weekly during the year.

III. PROFESSIONAL AND OTHER COLLEGES.

LAW DEPARTMENT.

Students will be admitted at any time; but those who are not Collegiate graduates must be 20 years of age to enter this Department.

Course of Study.

FIRST TERM.

Judge Orton	Personal Property, Partnership, Corporations. Contracts of Sale.
Prof. Carpenter	Criminal Law.
Judge Cole	Domestic Relations.
Prof. Vilas	The Constitution and Jurisdiction of Courts. Common Law Pleadings.

SECOND TERM.

Judge Orton	The Law Merchant, covering negotiable paper, suretyship and guaranty. Insurance. Fixtures.
Prof. Carpenter	Contracts.
Judge Paine	Practice.
Prof. Vilas	Equity Pleading. Pleading under the Code.

THIRD TERM.

Judge Orton	The Law of Real Estate, Uses, Trusts, Powers and Wills;

Assisted by a Member of the Dane County Bar on the Law of Taxes and Tax Titles.

Prof. Carpenter	Bailment and Agency.
Judge Dixon	Equity Jurisprudence.
Prof. Vilas	Law of Evidence.

FEMALE COLLEGE.

Young ladies desiring to enter upon the first year of the following course of instruction must pass a satisfactory examination in the Outlines of Geography, Elements of English Grammar, and in Arithmetic to Proportion.

Those applying for advanced standing must pass examination in all the studies to which the class which they propose to enter have attended, or others equivalent to them. Ladies may be admitted to this department, and allowed to select any three studies of the term which they are qualified to pursue.

Course of Study.

FIRST YEAR.

FIRST TERM.

Mathematics	Higher Arithmetic.
English Language	Verbal and Sentential Analysis.
Geography	Descriptive Map Drawing,
	General Exercises.

SECOND TERM.

Mathematics	Arithmetic, completed.
English Language	Analysis and Composition.
Geography	Descriptive Map Drawing.
	General Exercises.

THIRD TERM.

Mathematics	Elementary Algebra.
Geography	Physical.
History	United States.
	General Exercises.
Reviews	Studies of the year.

SECOND YEAR.

FIRST TERM.

Mathematics	Elementary Algebra, completed.
Language	Craik's English of Shakspeare.
Science	Botany.
History	Ancient.
Elective	French, Latin.

SECOND TERM.

Mathematics	Plane Geometry.
Science	Physiology.
History	Mediæval.
	General Exercises.
Elective	French, Latin.

THIRD TERM.

Mathematics	Solid Geometry.
English Language	Literature—Shaw's Complete Manual.
Natural Science	Botanical Analysis.
History	Modern.
Reviews	Studies of the year.
Elective	French, Latin.

THIRD YEAR

FIRST TERM.

Mathematics	Higher Algebra.
Eng. Literature	Criticism and Literature, Shaw's Complete Manual, completed.
Natural Science	Zoology.
	General Exercises.
Elective	Latin, German.

SECOND TERM.

Mathematics	Higher Algebra, completed.
English Language	Rhetoric, Day's Art of Discourse. History of the English Language—Lectures.
Polity	Constitution and Science of Government. Political Economy,
Elective	Latin, German.

THIRD TERM.

Philosophy	Natural.
Philosophy	Mental.
Polity	Constitution of the United States.
Mathematics	Plane Trigonometry.
Reviews	Studies of the year.
Elective	Latin, German.

FOURTH YEAR.

FIRST TERM.

Mathematics	Spherical Trigonometry.
Natural Science ..	Chemistry.
Logic	Whateley.

SECOND TERM.

Natural Science ..	Astronomy. Geology.
History	Civilisation—Guizot.
Philosophy	Moral.

THIRD TERM.

Aesthetics	Bascom.
Natural Theology.	Chadbourne.
Evidences	Lectures. Essays and Reviews.
Elective	Ancient and Modern Languages throughout the year.

In addition to the prescribed course in this College, young ladies are instructed in any study taught in the College of Letters or Arts, for which they are prepared. They may also attend all University lectures. Instruction in this department is given by the President and Professors of the University as their services are required. Ladies receive the same degrees as gentlemen for the same or equivalent courses of study.

POST GRADUATE COURSE.

The object of this course is to secure a higher grade of scholarship in Literature and Science than it seems possible to attain in the present state of our colleges, under the ordinary class system.

Bachelors of Art, Science and Philosophy will be admitted to this course as candidates for the degree of Doctor of Philosophy. They must devote two years to study under the direction of the President and Faculty, and pass a satisfactory examination before the Board of Examiners appointed by the Regents.

The studies are optional; but they must be selected from at least two sections, and the studies in some one section must be continued during the whole course.

Students who have pursued this course for one year, on satisfactory examination, are entitled to the Master's Degree.

SECTION I. NATURAL HISTORY.
- Botany.
- Mineralogy.
- Geology.
- Mining.

II. CHEMISTRY.
- Chemical Philosophy and Physics.
- Qualitative and Quantitative Analysis.
- Applied Chemistry.

III. MATHEMATICS AND PHYSICS.
- Pure Mathematics.
- Mechanics and Physics.
- Astronomy.
- Engineering.

SECTION IV. PHILOSOPHY AND HISTORY.
History and International Law.
Psychology and History of Philosophy.
History and Criticism of Eng. Literature.

V. PHILOLOGY.
Latin and Greek Languages and Literatures.
Comparative Philology.
Modern European Languages.

Some young men who have graduated are able to pursue certain studies in this course, and at the same time to render such services as instructors as to pay their expenses. These young men can secure in this way a rank in scholarship and an experience in instruction and government that will qualify them for high positions as professors and teachers.

PREPARATORY DEPARTMENT.

The object of this department is to fit young men for entering either the College of Arts or the College of Letters. Each member of the Faculty has a general direction of the studies pertaining to his department, and renders such assistance as may be required. Those who enter this department are subject to the same rules, and allowed the same privileges as college students.

The course of study is now reduced to one year. The optional courses in Latin and Greek, however, offer ample opportunities for those who desire to prepare for the College of Letters.

It is expected that the time will soon come when this department can be abolished. But for the present it seems to be essential to the welfare of the University, not only in securing numbers for the higher classes, but also a grade of scholarship essential to the best interests of the institution.

COURSE OF STUDY.

English Grammar.
Arithmetic.
Geography.
Algebra to Quadratic Equations.
Allen's Latin Lessons and Grammar.
Allen's Latin Reader and Composition.
Four Orations of Cicero.
Morris' Grammar of Attic Greek.
Arnold's Greek Reader and Composition.
Ancient History, Geography and Antiquities.

Exercises in Reading, Declamations, Written Translations and Compositions through the year.

LECTURES.

In addition to the lectures given in connection with the recitations, some subjects are taught entirely by lectures, the students being required to take notes, and to recite upon the lectures, the same as when a text-book is used.

The following are the regular courses of Lectures:

To the Senior Class on Mental and Moral Philosophy, by the President; on Geology and Mining, by Prof. Irving; on Evidences, by Prof. Carpenter, and on Astronomy, by Prof. Sterling.

To the Junior Class, on Chemistry and Physiology, by Prof. Davies; on Comparative Zoology by Prof. Verrill; on History, by Prof. Allen; on Civil Polity and International Law, by Prof. Parkinson; on Mechanics and Physics, by Prof. Sterling, and on Rhetoric and English Literature, by Prof. Carpenter.

To the Sophomore Class, on Structural and Systematic Botany, by Prof. Davies; on Practical Botany and Agriculture, by Prof. Daniells, and on History by Prof. Allen.

To the Freshman Class, on the Laws of Health and Methods of Study, by the President; on History, by Prof. Allen; and on Natural History in its relations to the Arts, by Prof. Davies.

To all the classes, on Philology, by Prof. Feuling.

To Special Students on Analytical Chemistry, by Professor Daniells.

In addition to these courses, other Lectures are delivered on special subjects, by members of the Faculty and other scientific gentlemen.

It is the aim of the University to meet the educational wants of every student in the State. The courses of study as laid down are intended to be the mere outlines of work. In the optional studies and post-graduate course there is provision for all the demands of higher scholarship which are now made upon the Institution.

By vote of the Regents, the Faculty may excuse a student from any study in either course and substitute for it any other of equal educational value, such action of the Faculty being a matter of record.

PROGRESS AND WANTS OF UNIVERSITY.

It is gratifying to the Regents to be able to report a substantial progress during the past year. In each branch of instruction creditable progress has been made, and the examinations at the close of the year exhibited a closeness of application, and thorough teaching, creditable alike to students and teachers. Reference is invited to the report of the Board of Examiners, which will be found in the appendix.

We also call attention to the report of Harlow S. Orton, LL. D., Dean of the Law Faculty, published in the appendix. This Department, we are happy to say, is in most excellent condition. The Board of Visitors speak in the highest terms, in their report, of the closing examinations of the year. We are persuaded that no better facilities for the study of law are to be found anywhere in the West, than are afforded by the Law Department of the University of Wisconsin.

FACULTY.

It is a matter of deep regret that the Regents have to record the withdrawal of Paul A. Chadbourne from the Presidency of the University. The Board were long aware that the health and private interests of the President had determined him to give up his charge, but they still hoped that he might be induced to continue in his place. His services as President, closed with the Collegiate year, and the Regents feel it due to President Chadbourne, to themselves, to the University, and to the State, to express here their conviction that his departure is a great loss to the educational interests of the State. They have heretofore often publicly expressed their sense of the high value of his services, and they take pleasure in saying that the fruits of his labors have identified him with the

University, and that he will long be held in grateful remembrance. We regret to announce that we are deprived of the services of Col. W. S. Franklin, Professor of Military Science and Engineering. Under his judicious management that department was fast taking a high rank in standing and usefulness, and becoming one of the chief attractions of the University.

At the last meeting of the Board of Regents, this Department was placed on the same footing with other Professorships, and though, from inability to obtain as yet a permanent head to the department among officers of the army, the Board have lost no confidence in its practicability and usefulness as a department. When the department was organized, it was expected that the army would furnish us with a Professor, whose salary would be paid by the general government, provision having been made by act of Congress for the assignment to duty of twenty officers of the army, as heads of the departments, in as many different Colleges.

It seems proper that the government should furnish such Professors, inasmuch as the course of military studies and engineering is one of national rather than individual benefit. The detail of an officer of the army for this Professorship cannot be relied upon, owing to the exigencies of army service, and it is quite probable that the Board will have to pay the expenses of this Professorship from the funds of the University, in order to secure permanency in its instruction.

The chair of Geology, Mining, and Metallurgy, having been created at the last annual meeting of the Regents, it was filled by the election of Mr. R. D. Irving, as Professor. His services as such will commence with the winter term of 1870, and will afford one of the finest opportunities to students to perfect themselves in practical mining knowledge—a branch of education for which the boundless mineral resources of our land are daily making urgent demands.

The vacancies in the instructional force created by the resignation of President Chadbourne and Colonel Franklin, have devolved largely increased labors on the Faculty, which, however, have been cheerfully and promptly met.

Much needed assistance was received, in the good fortune of securing a course of lectures on Botany, from President Chadbourne; otherwise the studies in this department of Natural History would have gone over to another term.

The Regents have not yet been able to supply the vacancy in the Presidency of the University, our hopes in this direction not having been realized. It is extremely gratifying to be able to say, that the place has been most ably filled temporarily, by the honored Vice President. There is little doubt that at the annual meeting of the Regents in June next, we shall be able to announce that the Presidency, as also the chair of Military Science, have been filled.

ATTENDANCE.

The rapid growth of the University, in attendance, from its reorganization up to the date of the last annual report, has not been quite realized during the present year. While there has been a slight diminution in the aggregate attendance, there has been a material increase in the average attendance, shown by an increase in fees of more than $1,500 over last year.

During the past two years, the number of students in regular classes has grown from 81 to 132, while in the Preparatory Department the number has receded in the same time from 193 to 102. The *material* growth in higher instruction, is therefore encouraging, and leads to the hope that ere long the Preparatory Department may be entirely abolished, thus leaving our University a free career in the education of those higher classes of students for whom it was especially designed.

Another feature in the *kind* of education is worthy of special attention.

Reference to the catalogues of 1859 and 1861, will show that in the small number of students then in attendance, compared with the much greater number now, there were only four classical students less then than at present, and that the growing demand for collegiate education has been still in the direction of *scientific* studies.

The diminution in the aggregate attendance of students the present year, finds abundant explanation in the stringency of the times, and the low price of farm productions. Many sons and daughters of farmers have been compelled, from this cause, to omit for a time, their course of studies.

Another cause may be found in the higher acquirements for admission to the preparatory department, and the more thorough examinations for admission, from which have come many rejections of applicants.

The inability of the University to furnish rooms, is still a drawback—for the price of board and rooms in the city is beyond the reach of many excellent students.

The above causes of diminished attendance we find are common to many other institutions of learning throughout the country.

IMPROVEMENTS.

1. The Female College building, for the erection of which $50,000 was generously appropriated at the last session of the legislature, is fairly under way. The basement is fully completed, and it is expected that the building will be ready for occupancy at the opening of the next fall term.

This edifice, plain but neat in its external appearance, substantially built, and provided with all modern improvements and conveniences, admirably suited in all its arrangements to the wants of the department, will be an ornament to the University grounds, and an honor to the wise munificence of the State.

While the illiberal policy on the part of our State towards its own University has, in years past, been a matter of reproach, at home and abroad, we are proud to say that Wisconsin is far in advance of her sister States in the noble provision which she is making for the higher education of the daughters of the State.

In carrying out the wise policy of the legislature, it is the purpose of the Regents to do all in their power to provide for ladies the same facilities for college education enjoyed by gentlemen.

This building when completed will not only afford ample and convenient accommodations for the students and officers of this college, for many years to come, but will, in many ways, contribute to the relief of the other departments, as set forth in the last report.

2. A building for drill and gymnastic exercises has just been completed at a cost of about $4,000. It is a plain, substantial structure, admirably adapted for the uses for which it was designed.

The main building is 100 feet by 50 feet. To this is attached a wing, 34 feet by 20 feet, containing an armory, and office for the professor of military tactics.

The provision of a separate building for the military department, which was made on the urgent recommendation of Col. Franklin, we regard a measure of very great importance. It leaves at our disposal much room in University Hall, before occupied for military purposes, which was greatly needed for other uses. It relieves the building too of much noise and disturbance incident to military drill. Besides, it affords a commodious room, not only for drill, but for exercise during cold or rainy weather.

3. *Metallurgical Laboratory.*—To meet the wants of the new department to be occupied by Prof. Irving, extensive changes have been made in the north basement of University Hall. The walls have been furred and plastered, a brick floor laid in mortar, new passage ways opened, the areas of the windows widened to admit more light. Thus the whole of the basement has been brought into use; and, after reserving enough room for storage, Laboratories have been provided for Analytical Chemistry and Metallurgy, that will be entirely satisfactory till the number of students becomes too large to be accommodated in them.

At the opening of the winter term the new laboratory will be supplied, under the direction of Prof. Irving, with tables for work in Practical Mineralogy, and furnaces for the reduction and assay of ores.

The opening of this Department will afford a greatly needed relief to the Department of Chemistry and Natural History, the professor of which has hitherto performed all the work. In thus dividing the duties, and with the increased conveniencies and appliances, each of these Departments will receive a new impetus, and results will be reached which were not within the grasp of the overburdened Professor of Chemistry.

FUTURE WANTS OF THE UNIVERSITY.

It is not the design of the Regents to ask from the Legislature of the State, any further appropriation during the present collegiate year. The liberal donation for a Female College is only partially expended, and not until the fruits of that judicious gift can be seen and appreciated, do we propose to solicit additional aid. But while we refrain from applying for means to supply all our wants, it is manifestly proper to keep before the guardians of the State the fact that in order to carry out and realize for the young people of the State, the design in which the University was conceived, and for which the Regents and Faculty have energetically worked, we *must* have future additional appropriations. I ask attention to that portion of my report for last year, which refers to the need of an observatory, and a chapel or public hall. These needs are growing yearly, keeping pace with the growth of the University, and the continually increasing demand for greater facilities in the accomplishment of a higher education.

Unmeasured good comes to all classes connected with the University, from feeling that the people of the State, through their chosen representatives, manifest an interest and State pride in the prosperity of their chief educational school. It cheers the teachers, whose highest reward is to see the fruitage of their labors in the sending out of accomplished young men and women to labor in yet broader fields, and it is an effectual stimulus to the students to strain every nerve, and make the most of the advantages within their reach. It is not too much to say, that the influence of the University is already felt throughout the commonwealth, in the reaching for a higher and better education, and that even more has been accomplished in this direction than could have been hoped for by those who know the difficulties contended with, and the limited means given with which to work.

In conclusion, I beg to call your special attention to the reports of the Treasurer and Secretary, and to that of the Professor of Agriculture. In the latter, special mention is made of improvements, at small expense, on the University farm, under the direction of Mr. T. B. Van Horn, which add greatly to the attractions of the University, as also to the city of Madison. The taste and judgment of Mr. Van Horn are worthy of special commendation.

I have also to ask that you will bring to the notice of the Legislature, the importance to the University of such legislation as will enable the Board of Regents more directly to control the sale of

University and Agricultural College Lands. As fast as these lands are called for, they are sold at the minimum price of $1.25 per acre, and the working of this system has no other effect than to realize for the University the lowest possible price for its endowment lands. We wish authority to withhold a portion of the best of these lands from market, until the development of the regions where they are located will enable us to dispose of them at a far greater price. Had such a course been adopted on the organization of the University, we should now have had an ample endowment, and been saved from the necessity of begging at the doors of the State Councils for the meager sums necessary to make the institution one of even reasonable usefulness.

C. S. HAMILTON,
President of Board of Regents.

APPENDIX.

APPENDIX 1.

REPORT OF BOARD OF VISITORS.

To the Board of Regents of the University of Wisconsin:

GENTLEMEN—The undersigned, members of the Board of Visitors, appointed by your Honorable Body for the current year, beg leave to report as follows:

We were present at the examination of the several classes in the several Departments of the University, and at the commencement exercises, covering the time from June 14th to June 22d inclusive.

We found the University in a prosperous and decidedly encouraging condition, served by a Faculty of competent, earnest and efficient instructors, doing all that can be done with the means at their command. It gives us pleasure to speak of their competence and fidelity in their work.

The examinations sustained by the classes were fully up to the average of similar standing and departments, in the colleges of the older states; and in some instances there were not wanting evidences of marked proficiency, particularly in the departments of Mathematics and Natural Science. And the earnestness, and intelligent purpose, evinced by the students generally, were as marked as commendable.

The examination of the Law class in the University, conducted by Judge Orton and Mr. Vilas, was especially gratifying. The thoroughness and promptness, apparent to all, reflected great credit upon the ability of the instructors and the industry of the students; and while it becomes those not skilled in legal lore to speak with becoming modesty, it was nevertheless very evident that between teacher and pupils the lines of communication were in most perfect working order. As this is but the second class graduated from the Law Department, the University may well be congratulated upon its brilliant success, and the State assured that her sons will have no occasion to seek professional training from institutions abroad.

On commencement day the orations of the young gentlemen of the graduating class were marked for their direct, forcible and practical thought, well expressed and delivered in the main. Some of them evinced superior ability and gave unmistakable promise for the future.

The Agricultural Department we were gratified to find already inaugurated, and although but little, of course, has as yet been accomplished, still the wisdom of its establishment is evident. The means for its full development, we trust, will not long be wanting, and thus proof of its practical utility furnished to the people of the State.

We saw less of the Female Department of the University than of the male, and consequently cannot speak concerning it with so much definiteness. It occurred to us, however, that for the securing of the best advantages, of liberal education, the *administration* of this *dual* organization of the University needs revising in some respects but as it requires wiser heads than ours to indicate the best course, we confidently leave the matter to your superior wisdom, with only this passing reference. Considering the great possibilities that lie in the scope of the University, as the ward of the State, we cannot forbear a suggestion or two.

A prime and immediate necessity of the Institution is, an *Astronomical Observatory*. We are aware that the guardians of the College have not been unmindful of this deficiency; but if any word of ours may renew attention to the matter, and hasten action we gladly and earnestly add it. It seems greatly to be regretted that the fruitage of the University should be delayed from the lack of this essential means.

Another thing we would call attention to is, a more thorough drill in the Preparatory Department. The defect here was very apparent. No student can make his college course a full success who is badly fitted. The elements of Latin and Greek should be thoroughly mastered, before entering upon the curriculum proper of the College. This requires time and drill, under careful and competent masters. We feel constrained, respectfully to make this note.

The visitors were impressed with the fortunate situation of the University. The aspects of nature have ever been powerful tutors in the creation of mental character. These unconscious tuitions, plastic as potent, cannot be too highly estimated. The grounds of the University admit of and invite artistic development; and although our immature civilization cannot hope, yet, to vie with an Oxford or a Cambridge, still we may lay the foundations, and work upon a scale that in the end may reach results surpassing even those.

The circumstances then, of the University, all things considered, the priceless interests of education connected with it, the high, commanding influence it should aspire to, in the rapidly growing section of our country where it has its life, and the great and beneficent possibilities lying in its original conception, bespeak for the University, from the people of the State, their most liberal provisions and fostering care.

Respectfully submitted,

J. L. DUDLEY,
ALEXANDER KERR,
D. L. LEONARD,
J. W. McLAURY.

APPENDIX 2.

REPORT ON LAW DEPARTMENT.

To the Hon. Chas. S. Hamilton,

President of the Board of Regents of the Wisconsin University:

The Law Department of the University entered upon its present and third year, under circumstances of great prosperity and promise, with a class of fourteen students, which soon increased to the present number of eighteen, with an expectation of a still larger number for the second term.

The class is composed of young men of most excellent abilities, qualifications and character for the bar, and are most attentive and diligent students.

The course of instruction adopted and whose advantages have been made apparent, both in the great progress of the present class and in the successful practice of those who have enjoyed the facilities of this department in the past two years, and are now its alumni, consists of lectures on all branches of the law, with copious references to the reports and moot court trials. By the kindness of the State officers, the room formerly occupied by the Bank Controller is now used as a lecture room for the class, and the State Library, which is one of the best selected and most complete in any western State, is at all proper times accessible to the law students. The terms of the Circuits and Supreme Court, and of the Federal Court of the Western District are so arranged that one or more are in session nearly the whole year, at the Capitol. By these superior advantages it is submitted that in this department, students of the law enjoy as great (if not greater) facilities for a thorough professional training as in any law school in the United States.

The Department is already deemed a great success, and is well and firmly established with most encouraging prospects for the future, and it is hoped will fully realize the expectations of its friends, and vindicate the wisdom of the Regents, under whose judicious management the general affairs of the University are in so prosperous a condition, and by which this department has been founded and encouraged. Respectfully submitted.

H. S. ORTON,
Dean Law Faculty.

Madison, October, 1870.

APPENDIX 8.

SECRETARY'S REPORT.

MADISON, November 1, 1870.

GEN. C. S. HAMILTON,
President of the Regents of the University of Wisconsin:

SIR: I have the honor to submit herewith the following statement of the funds pertaining to the State University, exhibiting the receipts and disbursements for the year ending September 30, 1870:

UNIVERSITY FUND.

This fund consists of the proceeds of the sales of land granted by Congress for the support of the University.

Receipts.		
Sales of land	$851 14	....
Dues on certificates of sale	1,452 00	....
Penalties and forfeitures	71 37	....
Taxes	6 12	....
Total receipts	$2,380 63	....
Disbursements.		
Loan to School Dist. No. 1, Chilton, Calumet Co	....	$1,000 00
Refunded for overpayment	....	23 40
Transfers to other funds	....	1 44
	$2,380 63	$1,024 84
Balance September 30, 1869	580 18	....
Balance September 30, 1870	....	1,935 97
	$2,960 81	$2,960 81

The amount of this fund which was productive at the end of the fiscal year ending September 30, 1869, and 1870, respectively, was as follows:

	1869.	1870.
Amount due on certificates of sale	$66,906 14	$67,074 14
Amount due on mortgages	5,792 00	6,792 00
Certificates of indebtedness	111,000 00	111,000 00
Dane county bonds	19,000 00	19,000 00
	$202,698 14	$203,866 14

Showing an increase in the productive fund during the last year of $1,168 00.

The changes in the first two items of the productive fund, as compared with the same items, September 30, 1869, have been produced as follows:

Amount due on certificates of sale, Sep. 30, 1869	....	$66,906 14
Decreased by payments	$1,452 00	....
Decreased by forfeitures	1,659 00	....
		3,111 00
		$63,795 14
Increased by new certificates of sale		3,279 00
Amount due on certifictes of sale, Sep. 30, 1870		$67,074 14
Amount due on mortgages, Sep. 30, 1869		$5,792 00
Increased by new loan		1,000 00
Amount due on mortgages, Sep. 30, 1870		$6,792 00

AGRICULTURAL COLLEGE FUND.

This fund consists of the proceeds of the sales of 240,000 acres of lands granted by Congress to the State, for the support of an institution of learning, where shall be taught the principles of agriculture and the arts. The interest on the productive fund forms the income.

Receipts.

Sales of land	$15,827 09	....
Dues on certificates of sales	1,247 00	....
Penalties and forfeitures	83 14	....
Dane County Bonds	5,000 00	....
	$22,107 23	....

Disbursements.

Loans	....	$6,100 00
Certificates of indebtedness	....	30,600 00
Refunded for overpayment of interest	....	13 00
	....	$36,713 00
Balance, September 30, 1869	$23,528 84	....
Balance, September 30, 1870	....	8,923 07
	$45,636 07	$45,686 07

The amount of productive fund September 30, 1869 and 1870, respectively, was as follows:

	1869.	1870.
Dues on certificates of sale	$72,526 40	$113,646 20
Certificates of indebtedness	3,000 00	33,600 00
Mortgages, (for new loans)	....	6,100 00
Dane County Bonds	$11,000 00	6,000 00
	$86,526 40	$159,346 20

Showing an increase of the productive fund during the fiscal year, of $72,819.80.

The changes in the first, third and fourth items of the productive fund as compared with the same items, September 30, 1869, have been produced as follows:

Amount due on certificates of sale, Sept. 30, 1869,	....	$72,526 40
Decreased by payments	$1,247 00	....
Decreased by forfeitures	589 00	1,836 00
		$70,690 40
Increased by new certificates of sale		42,955 80
Amount due on certificates of sale, September 30, 1870		$113,646 20
Amount due on certificates of indebtedness, September 30, 1869		$3,000 00
Increased by new certificates of indebtedness		30,600 00
Amount due September 30, 1870		$33,600 00
Amount due on Dane county bonds, September 30, 1869		$11,000 00
Decreased by payments		5,000 00
Amount due, September 30, 1870		$6 000 00

The receipts and disbursements of the income of the several funds are exhibited in the following statement:

UNIVERSITY FUND INCOME.

Receipts.

Interest on principal due on lands	$6,104 40	....
Interest on certificates of indebtedness	7,770 00	....
Interest on Dane County Bonds	1,330 00	....
Students, for tuition and room rent	7,133 00	....
Students, for fuel sold them	275 75	....
Students, for chemicals sold them	76 00	....
Students, for repairs (damages)	5 25	....
Boarding department, for advances	40 00	....
P. A. Chadbourne, contingent advance returned	300 00	....
John L. Lewis........do..............do	50 00	....
Appropriation from General Fund, chapter 82, General Laws of 1867	7,303 76	....
Transfer from General Fund, to correct errors	28 77	....
	$29,416 93	....

Disbursements.

Salaries of instructional force	....	$20,958 33
Expenses of Regents	....	319 36
Insurance	....	450 00
Repairs	....	1,330 26
Incidental expenses	....	2,262 87
Fuel	....	1,379 24
Printing and advertising	....	448 95
Library	....	329 24
Furniture	....	66 25
Apparatus	....	245 00
Tuition fees and room rent	....	195 00
Improvements	....	2,759 32
Contingent advances to be retnrned	....	100 00
Refunded for overpayment of interest	....	108 32
	$29,416 93	$30,947 14
Balance, September 30, 1869	4,074 64	....
Balance, September 30, 1870	....	2,544 43
	$33,491 57	$33,491 57

The accounts audited and paid from the income of the University fund were in detail as follows :

Salaries of President aud Instructional force.

P. A. Chadbourne, President	$2,250 00	....
J. W. Sterling, Vice-President	2,050 00	....
J. B Parkinson, Professor	1,800 00	....
S. H. Carpenter....do	1,800 00	....
Wm. F. Allen, ...do	1,800 00	....
J. B. Feuling,......do	1,650 00	....
W. S. Franklin....do	450 00	....
W. W. Daniells....do	1,800 00	....
J. E. Davies.......do	1,800 00	....
A. E. Verrell......do	800 00	....
H. S. Orton, Dean of Law Faculty	1,250 00	....
J. H. Carpenter, Professor...do	625 00	....
Wm. F. Vilas,......do......do	625 00	....
R. B. Anderson, Instructor	650 00	....
D. B Frankenberger,.do	608 33	....
A. C. Parkinson.....do	50 00	....
R. M. Bashford,... .do	50 00	....
C. L. Ware, Preceptress	600 00	....
Clara D. Bewick, Assistant	400 00	....
Lizzie S. Spencer, Assistant	400 00	....
		$20,958 33

Insurance.

Main & Spooner	$175 00	....
Miller & Hobbins	187 50	....
C. Ainsworth	87 50	....
C. H. Vilas	100 00	....
		$450 00

Expenses of Regents.

C. S. Hamilton	$26 45	
Angus Cameron	30 55	
Aug. L. Smith	65 65	
J. S. Bugh	70 00	
B. R. Hinckley	29 50	
R. B. Sanderson	11 50	
J. R. Brigham	24 85	
A. Van Wyck	13 50	
H. H. Gray	20 00	
Sam'l Fallows	17 86	
		$319 86

Repairs.

Wayne Ramsay & Co., hardware	$476 49	
James McDowell, carpenter work	708 65	
Wm. A. Mears, lumber	72 21	
E. Sharp & Co., plastering	45 06	
P. A. Chadbourne, bills paid by him for labor	20 85	
C. C. Robbins, painting	12 00	
		$1,330 26

Incidental Expenses.

P. A. Chadbourne, bills paid by him	$390 05	
J. W. Sterling, bills paid by him	21 73	
Patrick K. Walsh, janitor services	540 00	
James McDowell, Jr., janitor services	197 75	
Geo. W. McDougall, services as detective	40 00	
N. B. Van Slyke, trav. expenses, &c., on building com.	55 90	
H. H. Gray ... do ... do	49 00	
J. R. Brigham ... do ... do	7 05	
B. R. Hinckley ... do ... do ... farm com	31 50	
R. B. Sanderson ... do ... do ... do	9 00	
John S. Dean, salary as secretary	200 00	
John S. Dean, postage paid	2 26	
J. L. Lewis, freight paid	9 33	
Patrick K. Walsh, expenses cleaning house	76 20	
Hatch & Co., diplomas	40 30	
S. Klauber & Co., ribbon for diplomas	3 50	
D. L. Leonard, expenses as visitor	40 40	
J. L. Dudley ... do	21 75	
J. W. McLaury ... do	40 35	
Alexander Kerr ... do	20 00	
H. C Dickinson ... do ... in 1869	14 00	
J. F. Luhme & Co , chemicals	171 06	
A. H. Van Norstrand, merchandise	26 03	
Dunning & Sumner ... do	64 20	
Moseley & Bro., stationery	26 76	
Stoughton Band, music at commencement	60 00	
M. Hinrichs, use of steamboat for excursion	25 00	
B. D. Miner, refreshments for excursion	27 50	
A. Kentzler, livery	24 50	
M. M. Dorn & Co., livery	21 50	
Riley & Thompson, livery	4 00	
Lewis R. Larson, sawing wood	2 25	
		$2,262 87

Fuel.

Dawson Kennedy, wood furnished	$556 12	
Ole Elickson, do	334 25	
John Schave, do	250 37	
Fritz Engel, do	222 25	
Fritz Eiver, do	16 25	
		$1,379 24

Printing and Advertising.

Atwood & Rublee	$145 00	
Bond & Chandler, wood cuts	60 00	
A. E. Gordon	35 00	
Advertising commencement of terms	208 95	
		$448 95

Library.

Books purchased by P. A. Chadbourne	$213 69	
W. W. Daniells	27 60	
J. W. Sterling	13 25	
of Moseley & Bro	35 00	
W. J. Park & Co	35 90	
Freight paid on books by J. L. Lewis	3 80	
		$329 24

Furniture.

Darwin Clark	$17 50	
Bowen Block Furniture Co	48 75	
		$66 25

Apparatus.

E. S. Ritchie & Sons		245 00

Tuition Fees and Room Rent.

Tuition refunded to students	$15 00	
Rent paid for rooms for students	180 00	
		$195 00

Improvements.

Paid for labor fitting up laboratory	$362 00	
....do.......on woodshed and armory	135 18	
Paid Fish & Stephens for mason work and materials	358 17	
Paid Bunker & Vroman for lumber	1,903 47	
		$2,759 32

Contingent.

Advance to J. L. Lewis, to pay bills	$50 00	
Advance to Thos. B. Van Horne, to pay bills	50 00	
		$100 00

Refunded.

Refunded for overpayment of interest		$108 32
Total disbursements		$30,947 14

AGRICULTURAL COLLEGE FUND INCOME.

Receipts.

nterest on principal due on lands	$7,321 89	
Interest on certificates of indebtedness	3,427 57	
Interest on Dane county bonds	628 05	
	$11,377 01	

Disbursements.

Refunded for overpayment of interest		$29 61
Paid on account of experimental farm		3,170 89
	$11,377 01	$3,200 50
Balance, September 30, 1869	4,182 92	
Balance, September 30, 1870		$12,359 43
	$15,559 93	$15,559 93

EXPERIMENTAL FARM.

Receipts.

On account of sale of lots south of railroad	$241 09	
Sale of farm products and pasturage	166 00	
Rent of brick house	112 50	
From Agricultural College Fund Income	3,170 89	
	$3,690 48	

Disbursements.

SUPERINTENDENCE AND LABOR.

John L. Lewis, salary as superintendent		$500 00
....do........boarding farm hands		177 00
Thos. B. Van Horne, salary as superintendent		166 66
. ..do.............boarding farm hands		79 62
....do.............laying out grounds		176 00
Paid laborers upon the farm		1,068 28
Paid students for labor on farm		277 03
Chas. Sylvester, building fence		26 50
		$2,471 09

INCIDENTALS.

Wayne Ramsay & Co., farm implements		$102 91
N. B. Cramton, blacksmithing		12 35
J. L. W. Newton....do		59 95
Wm. A. Mears, lumber		183 23
E. Morden, repairing pump		2 00
L. P. & M. P. Jerdee, fanning mill		27 00

Thos. Chynoweth, harness and repairing	....	67 48
Wm. T. Fish & Co., stone work, &c.	....	28 50
B. R. Hinckley, farm gate	....	8 50
Thos. B. Van Horn, farm wagon	....	50 00
E. F. Jones, hay scale	....	75 00
Wm. R. Burd, span of horses	....	375 00
Thos. Reynolds, horse "Lexington"	....	94 50
J. L. Lewis, cow	....	35 00
Geo. Memhard, painting sign	....	30 00
Steensland & Baker, seeds	....	26 00
Stevens & Son, trees	....	6 00
P. Purcell, oats	....	5 25
J. C. Starkweather, oats	....	6 00
S. H. Hall, oats	....	4 00
M. M. Dorn & Co., condition powder	....	1 00
Freight	....	19 72
	$3,690 48	$3,690 48

FEMALE COLLEGE FUND.

This fund consists of an appropriation made by chapter 54, general laws of 1870, amounting to $50,000.00, for the purpose of building an additional University edifice. By the terms of the act, $10,000.00 of the sum appropriated was to be placed at the disposal of the Regents on the first day of May, 1870, and the remainder on the first day of May, 1871.

Plans and specifications for a new building to be occupied by the Female Department of the University, were prepared, and advertisements "for proposals" to build said building were published in a newspaper in five of the principal cities of the State. The contract was awarded to Hon. John Fellenz, of Milwaukee, on the 21st day of July, 1870, and the building is to be completed October 1, 1871.

Receipts

From appropriation, chapter 54, general laws 1870	$10,000 00	....

Disbursements.

Paid John Felienz, on estimates	....	$4,163 28
Balance in the fund, September 30, 1870	....	5,836 72
	$10,000 00	$10,000 00

RECAPITULATION.

The balance in the hands of the Treasurer of the Regents of the University belonging to the *income* of the several funds, on the 30th day of September, 1869, was $8,257 56.

The receipts and disbursements including such balance, for the fiscal year ending September 30, 1870, were as follows:

Receipts.

Balance on hand September 30, 1869	....	$8,257 56
Interest on productive funds	$25,581 41	....
Appropriation by State	7,303 76	....
Tuition fees and room rent	7,133 00	....
From Students for fuel, chemicals and repairs	857 00	....
Advances returned	390 00	....
From State Gen Fund, to correct errors in transfers	28 77	....
Sale of lots, farm products and rent of brick house.	519 59	....
Total receipts for year		$41,313 53
Total receipts, including balances	....	$49,571 09

Disbursements.

On account of University Fund Income as per detailed statement	$30,947 14	....
On account of Agricultural College Fund Income, refunded interest	29 61	....
On account of Experimental Farm as per detailed statement	3,690 48	
Total expenditures		$34,667 23
Balance on hand, September 30, 1870	....	$14,903 86
Balance of Female College Fund on hand	....	5,836 72
Total balance in hands of Treasurer	....	$20,740 58

The available income for the fiscal year ending September 30, 1871, may be estimated as follows:

Interest on productive funds	$25,000 00
Appropriation by State	7,303 76
Tuition fees and room rent	7,000 00
	$39,303 76

Very respectfully,
Your obedient servant,
JOHN S. DEAN,
Secretary of Regents of the University.

APPENDIX 4.

TREASURER'S REPORT.

Hon. Charles S. Hamilton,

President of the Board of Regents of the University of Wisconsin:

Sir: I have the honor herewith to submit my report as ex-officio Treasurer of the Regents of the State University, exhibiting in a condensed form, the receipts and disbursements for the year ending September 30, 1870.

Very respectfully, your obedient servant,

HENRY BÆTZ, *State Treasurer,*
Ex-officio Treasurer of the Regents of State University.

REPORT *of* **HENRY BÆTZ**, *Treasurer of the Regents of the University of Wisconsin, showing the receipts and disbursements of the University during the year ending Sept.* 30, 1870.

RECEIPTS.

Balance in University Fund Income, Oct. 1, 1869.	....	$4,074 64
State Treasurer, on acc't of Agricultural College Fund Income (including balance in fund Oct. 1, 1869)	....	15,530 32
State Treasurer, on account of the University Fund Income	....	29,936 52
State Treasurer, amount appropriated by Legislature for Female College building	....	10,000 00
Total		$59,541 48

DISBURSEMENTS.

Salaries of professors and terchers	$20,958 33	....
Expenses of Regents	819 36	....
Insurance	450 00	....
Repairs	1,330 26	....
Incidental expenses	2,262 87	....
Fuel	1,379 24	....
Printing and advertising	443 95	....
Library	329 24	....
Furniture	66 25	....
Apparatus	245 00	....
Tuition fees refunded and room rent	195 00	....
Improvements	2,759 32	....
Experimental Farm	3,690 48	....
Female College building	4,163 28	....
Contingent advances	100 00	....
Refunded for overpayment of interest	108 32	....
Total disbursements	$38,800 90	....
Balance on hand, September 30, 1870	20,740 58	....
		$59,541 48

HENRY BÆTZ, State Treasurer,
Ex-officio Treasurer of the Regents of the State University.

APPENDIX 5.

UNIVERSITY FARM.

REPORT OF PROF. W. W. DANIELLS.

HON. CHARLES S. HAMILTON,

President of the Board of Regents of the University of Wisconsin:

SIR:—I have the honor to submit herewith the report of the Department of Agriculture, for the year ending October 31, 1870.

PERMANENT IMPROVEMENTS.

Under the direction of Thomas B. Van Horn, superintendent of the grounds, one and three fourths miles of avenues have been constructed, three fourths of a mile extending along the shore of lake Mendota. These avenues afford pleasant drives, and add greatly to the attraction of the grounds by giving an opportunity to visit in carriages localities from which may be seen some of the most beautiful landscape views in this vicinity.

The fence enclosing the field south of the farm house has been removed, throwing the field open to correspond with the entire farm east of the barn. Upon the east side of Mary street, a substantial picket fence six feet in hight has been built. From different portions of the farm, stumps and stone have been removed, putting the land in better condition for cultivation.

A few evergreens, chiefly Scotch pines, ornamental trees and shrubs have been planted upon the grounds during the year.

DONATIONS.

The following donations have been received during the year:

From Dr. Joseph Hobbins, Madison—
36 varieties grape cuttings.

From J. C. Plumb, Esq., Milton, Wis.—
1 ash-leaved maple (*negundo aceroides*) and several ornamental shrubs.

From Robert Douglas, Esq, Waukegan, Ill.—

550	European mountain ash, 1 year old.
100	Scotch pine, 2 years old.
100	black spruce, 2 years old.
50	European mountain ash, 2 years old.
50	black birch, 2 feet high.

From Morrow & Brother, editors of the "Western Farmer"—
6 Miner plum trees.

From Department of Agriculture, Washington, D. C.—

1 peck	Chevalier barley.
1 peck	potato oats.
1-2 bushel	red bearded Saissette winter wheat.
1-2 bushel	white winter Touzelle wheat, also numerous varieties of vegetable seeds.

ORCHARD.

The orchard planted the spring of 1869 was prepared for winter as follows: Three rows, running across the orchard and embracing all the varieties planted, were well mulched with half rotted manure to the distance of three feet from the tree Three rows were heaped about with a conical mound of earth, fifteen inches in height, extending the same distance from the tree. About the trees of three other rows, snow was packed to the depth of fifteen inches, and upon this snow was put a sufficiently thick covering of coarse mulching to prevent its thawing before the warm weather of spring. Four rows were left entirely unprotected.

The bodies of the trees in one row of each of these different methods of treatment were covered with straw, to protect them from the influence of the sun. The remainder of the orchard was mulched in the ordinary manner. Each tree will receive the same protection the coming winter as during the past.

A few trees in the orchard have died; to all appearance the cause of their death being that the stock upon which the graft was set was too tender to withstand the severe freezing of the past winter. From the crown down for two or three inches the plants seemed perfectly dead, while no symptoms of disease were visible in any other part, and they all made, both in root and branch, an excellent growth during the season of 1869.

More of the dead trees are among those about which a mound of earth was placed, than are among those treated by any other method. This might lead, so far as any conclusion can be drawn from a single year's trial, to the belief that such mounds of earth are not sufficient protection against our severe winters, were it not that those trees left without protection show no more effects of suffering from the cold than do those protected most thoroughly.

The trees generally have made an excellent summer's growth. The north half of the orchard appears to have grown the most thriftily, showing the effects of more thorough protection from winds.

The vines of the Concord grapes have done well during the season. Those of the Delaware were many of them killed by the winter, owing to insufficient covering.

EXPERIMENTS.

WINTER WHEAT.

Treadwell Variety—White.—Weight of seed 60 pounds to the bushel. *Sample 1. One and three-fourths bushels, sown September 18, 1869, upon one acre of ground sloping to the northwest and protected on the west by a belt of timber. Snow fell upon this wheat November 17; ground not again bare until March. In first part of February one-half the pieces was mulched with coarse manure to prevent the injurious effects of alternate freezing and thawing during the spring months. Harvested July 12, 1870. Weight of straw and grain as drawn from the field, from part mulched, 980 pounds; from part not mulched, 420 pounds. Yield of mulched portion, 330 3-4 pounds—5 1-2 buushels. One bushel weighs 60 pounds. Yield of portion not mulched, 194 pounds—3 1-4 bushels. One bushel weighs 59 1-2 pounds.

Mediterranean Variety.—Weight of seed 57 pounds per bushel. Sample 2. One bushel and 18 quarts. Sown September 18, 1869, upon one acre of ground, lying as in preceding experiment, and protected in same way. Mulched as in Treadwell variety. Harvested July 11, 1870. Weight of straw and grain, as drawn from field, from part mulched, 260 pounds; from part not mulched, 85 pounds. Yield of portion mulched, 81 pounds. Yield of portion not mulched, 44 1-2 pounds. One bushel weighs 56 1 2 pounds.

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* The number of the sample in this and all following cases refers to labeled specimens kept in my office.

While these experiments show that winter wheat cannot be made a profitable crop here, they also show the beneficial results of even a light coating of mulching. These effects would doubtless have been more marked had the mulching been applied in the fall.

White Winter Touzelle Variety.—Seed imported from France, and furnished by Department of Agriculture at Washington. Sample 3. Weight 64 pounds to the bushel. Thirteen quarts sown September 18, 1869, upon one-third of an acre. Ground protected as in above varieties, and mulched at the same time. This wheat winter killed entirely.

SPRING WHEAT.

Experiments with different quantities of seed per acre.

Seed of "Mammoth" variety, sample 4, weight 57 pounds per bushel. Three adjacent plats were sown April 22, as follows: No. 1, two bushels to the acre; No. 2, one and one-half bushels to the acre; No. 3, one and one-fourth bushels to the acre. By a mistake of the workmen at the time of harvesting, these plats were not kept separate.

Experiment to compare the value of produce of wheat and corn per acre. (See first experiment under corn.)

Seed of "Mammoth" variety; weight 57 pounds per bushel; sample 4. One and one-half acres sown April 22, with 1 3-4 bushels per acre. Harvested July 29. Yield 1,006 pounds, 16.7 bushels. One bushel weighs 61 pounds.

The average price of wheat and corn in this market for the past five years, 1866 to 1870 inclusive, as reported by the "Wisconsin State Journal" for the last week in October, is as follows: Wheat $1.35; corn 0.59. At these prices the value of the yield of grain per acre, of these different crops, would be: Of wheat, $14.35; corn, $31.00. The greater value of the stalks than of the straw for fodder, makes the balance of the value of the produce still greater in favor of corn.

CORN,

To compare profit of raising corn with that of wheat 1 1-2 acres planted to Dutton variety May 8, in drills 3 1-2 feet apart; hills 20 inches apart in drill, two stalks in a hill. Harvested Aug. 30: Weight of ears, 5,538 lbs; weight of stalks, 4,760 lbs. Allowing 70 lbs. of ears for one bushel of shelled corn, this yield equals 79 bushels corn.

For comparison of values see experiment with wheat.

Arickaree Corn raised by "Ree" Indians of northern Dakotah. Grows there from eighteen inches to two feet in height, and is said to produce corn fit for eating in seven weeks after planting. Seed obtained of Regent N. B. Van Slyke. A few hills of this variety were planted May 9; the most forward ears upon which were thoroughly glazed and ripe July 29, or 81 days from time of planting. The ears are small, the grain white. It will be of little value, only for a very early variety in gardens.

Hon. W. W. Field, of Boscobel, exhibited at the State Fair in 1869, a stalk of pop-corn bearing ten fully ripened ears. Fifty hills were planted with seed from this stalk to ascertain if this prolific tendency could be fixed by propagation. No stalk of these fifty hills bore more than three ears.

Method of Saving Seed Corn.—In 1869, from the same field of the Dutton variety, some of the earliest ripening ears were picked and traced up immediately. The stalks bearing others of the earliest ears, were cut and the ears allowed to ripen upon the stalk. And at the time of husking, seed was saved in the ordinary manner, with no reference to its time of ripening. Plats of each of these varieties of seed were planted the past spring, and seed again saved from each plat in the same manner as that from which the plat was planted. It is proposed to continue this experiment through a series of years to ascertain to what extent the time of ripening may be changed by care in selecting the earliest maturing ears for seed. There was no visible difference between the plats this season.

To ascertain the relative value of seed from different portions of the ear, as from the tips, the middle and the butts, adjacent plants were planted last spring with seed from these different parts. Seed has been saved from each plat, which will receive similar treatment another year, the butts of ears raised from butts alone to be planted, that from the middle of ears raised from middle, etc.; the same treatment to be continued for several years. No weighed results are reported from this experiment this year, as the seed was purchased and was all poor. Even that from the middle of the ear did not all germinate.

In this connection it may not be out of place to state that the annoyance and immense losses that farmers often sustain from planting poor seed corn may readily be avoided by a little care on their part at the time of harvesting the corn. If at this time they will select the most fully ripened ears, and put them in a moderately warm place until thoroughly dry, they will have no more trouble from poor seed. If treated in this way, corn that is only well glazed at the time of harvesting will germinate readily. Corn for seed should never be exposed to hard freezing before being well dried.

OATS.

To compare the different kinds of oats now in cultivation, five varieties were sown, as follows:

Ramsdale Norway Oats.—One and one-fourth bushels sown April 27, upon 1-2 acre of ground. One bushel weighed 33 1-2 pounds. Sample 7. Harvested August 9. Yield by weight, 378 pounds. Weight of one bushel, 24.4 pounds. Yield per acre, 23.6 bushels.

Surprise Oats.—One and one-fourth bushels sown April 27, upon 1-2 acre. Weight of one bushel, 41 1-2 pounds. Sample 8. Harvested July 18. Yield by weight, 184 pounds. Weight of one bushel, 26.3 pounds. Yield per acre, 11.6 bushels.

White Norway Oats—One and one-fourth bushels sown April 27, upon 1-2 acre. One bushel weighed 37 1-2 pounds. Sample 9. Harvested July 18. Yield 220 pounds. Weight of one bushel, 26.5 pounds. Yield per acre, 14 bushels.

Common White Oats.—One and one-fourth bushels sown April 27, upon one-half acre. One bushel weighed 29 1-2 lbs. Sample 10. Harvested August 9. Yield 463 lbs. Weight of one bushel 22 lbs. Yield per acre 29 bushels.

Potato Oats.—Seed imported from Scotland and furnished by Department of Agriculture at Washington. Eight quarts. Seed sown April 25, upon one-eight of an acre. Sample 6. Harvested August 9. Yield by weight 100 lbs. One bushel weighs 26.6 lbs. Yield per acre 25 bushels.

These oats were all very seriously affected by the drouth, yet as the treatment was in all respects alike, except that the seed of the Potato oats was not weighed or sown quite as thick, the yield shows the relative value of the varieties for such a year as the past. The soil upon which they were grown was clay loam with clay subsoil, and was in a good state of cultivation. The following table gives the relative as well as actual product :

	Yield per acre.	Weight of one bu.	One lb. produced.
Ramsdale Norway	23.6 bu.	24.4 lbs.	9.0 lbs.
White Norway	14.0 "	26.5 "	5.0 "
Surprise	11.6 "	26.3 "	8.7 "
Common	29.0 "	22.0 "	12.5 "
Potato	25.0 "	26.6 "	....

CHEVALIER BARLEY.

Seed imported from Scotland, by Department of Agriculture, as an excellent variety for malting. Eight quarts sown April 25, upon one eighth of an acre. Sample 5. Harvested July 22. Yield, 84 pounds. One bushel weighs 44 1-2 pounds. Yield per acre 14 bushels.

GRASS.

The following experiments have been begun for the purpose of ascertaining if very heavy seeding is more or less profitable than the common method of light seeding.

Four adjacent plats of ground, containing one-fourth of an acre each, were sown April 18, to different quantities of grass seed—a mixture of equal parts, by measure, of clover and timothy. The severe drought will doubtless injure the accuracy of the results that might otherwise have been obtained from this trial, but it cannot at present be determined how great the injury will be.

POTATOES.

The experiments in seven different methods of preparing the seed, planting the product of each method in the same manner the second year, that were begun in 1868, were continued the present year.

Men were set to digging these potatoes without my knowledge, mixing the product of the different methods of treatment so that no results can be reported.

The experiments in hilling and flat culture were interfered with in the same manner.

Early Rose Potatoes.—One-eighth of an acre of ground was planted to this variety for the purpose of ascertaining the rate of increase in field culture. 227 potatoes, weighing 54 lbs. and making 825 hills were planted upon the plat May 10. Rows 3 1-2 feet apart, hills 20 inches apart in the row. Fully ripe and vines dead Aug. 5. Dug Aug. 31. Weighed 758 lbs., yielding at the rate of 101 bushels per acre. One lb. of seed produced fourteen lbs. From time of planting to full ripening of plants, 87 days.

ANALYTICAL CHEMISTRY.

The interest taken in this department of chemistry is rapidly increasing. The capacity of the laboratory has been increased one-half since last year, yet the number of applications for admission is now greater than can be accommodated.

Many students preparing for the profession of medicine, and others intending to be druggists, come here with special reference to the facilities afforded in this department, while the students in elementary chemistry find laboratory practice the only sure means of completing and fixing their knowledge of general chemistry.

Students are admitted to this department upon passing the first University examination in elementary chemistry.

The course of instruction in qualitative analysis is divided into four series, as follows :

1. Simple salts in solution, embracing the detection of one base and one acid.
2. Simple salts in solid form, including blow-pipe analysis.
3. Mixtures and double salts in solution, including the detection and separation of two or more bases and acids.

4. Mixtures, complex compounds, soils, ores, and refractory minerals.

The four series include one hundred analyses, leading gradually from the most simple to the most complex.

The rooms upon the north end of University Hall, corresponding to those on the south end now used for the Analytical Laboratory, are being fitted up for an Assaying and Metallurgical Laboratory, to be under the charge of the Professor of Geology, Mining and Metallurgy.

This laboratory will furnish to all students desiring such instruction excellent opportunities for obtaining a thorough and practical knowledge of assaying and metallurgical operations. In a state so largely interested in mining as is Wisconsin this must certainly prove to be an important department of the University.

ENTOMOLOGY.

As Wisconsin has no State Entomologist, I have begun a collection of the insects of this vicinity, paying particular attention to those that from their injurious or beneficial habits are of economic interest. On account of the limited amount of time I can get for purposes of collecting, in connection with my other duties, the collection is yet confined mostly to the more commonly occurring species. I shall embrace every opportunity to add to it by making exchanges and new collections.

The insect that at present is of the greatest economical interest to the people of the State, is the Colorado potato beetle, which, on account of the warm, dry weather, so favorable to its rapid increase, has been unusually abundant during the past summer. I have found no remedy except those mentioned in last years' report, hand-picking, and Paris green, mixed with from ten to fifteen times its weight of flour, which is now so commonly used In regard to the general use of this remedy, I am still of the opinion that it is of doubtful propriety, on account of the arsenic it contains, which then becomes a permanent ingredient of the soil. Hand-picking has not been successful the past year, mainly I think for the reason that it was not begun upon the first appearance of the beetles, and energetically followed throughout the season. By pursuing this plan, beginning early and continuing with perseverance, it must prove a successful remedy. But unless all the potatoe fields in the vicinity are protected in some manner, little can be accomplished, for as each female lays from 1,000 to 1,500 eggs, the rapid increase from one unprotected field will furnish a perpetual supply for those that are protected. It is to be hoped that the enemies of these pests, the lady birds, the soldier bugs, and other carniverous insects, are increasing rapidly, and that nature herself will, by this means furnish a check to the permanent prosperity of this insect.

METEOROLOGY.

Meteorological observations have been continued during the year, a copy of which together with those for March, 1869, omitted from last year's report, will be found accompanying herewith.

REVIEW OF THE SEASON.

The season has been in many respects a peculiar one. The cold, wet summer of 1869, was followed by a warm and sunny September, which ripened that corn that had survived the summer floods, and to a great extent matured the wood of fruit trees and vines which the unusually cold season had hindered. There were no frosts to injure vegetation until October 10, after which slight frosts occurred on several successive mornings. On the morning of October 20, the thermometer sank to 18 degrees Fahrenheit under cover, and must have sunk to 12 degrees where unprotected. This severe and sudden freezing had a very injurious effect upon orchards, nurseries and vineyards, freezing the plants so suddenly while the season's growth was still incomplete that in many cases the leaves, perfectly green, yet dry as if heated in an oven, remained upon the trees all winter. Many tender varieties of fruit trees and vines were killed entirely, and the young growth of the most hardy varieties was greatly injured.

The effect of this injury will doubtless extend over a series of several years, as it has in many cases so injured young plants as to produce a tendency to disease that will lead to premature decay and death. Older plants of the more hardy varieties, seem to have been affected but little, as is shown by the abundant fruitage of the present year.

From the 16th of November to the 19th, inclusive, 12 inches of snow fell, and the ground was not again bare until late in February. Although there was at no time a great body of snow, the depth was sufficient to furnish considerable protection against severe freezing where it was not blown away by the winds, as is shown in our experiments with winter wheat. The winter began early, and while the thermometer sank to 15° but once, the steady cold weather gave a low average temperature.

The mean temperature for January, the coldest month of the season, was 17°8'. The mean temperature for the coldest month of the preceding winter, February, 1869, was 22°9', a difference of 5°1'.

Between the springs of 1869 and '70, as great difference is found, but that of the present season is much the warmer. The mean temperature for the years mentioned, of April and May, those spring months during which farm work is carried on is as follows:

	1869.	1870.	Diff.
April	36°.7	49°.7	13°
May	54°.4	65°	10°.6
Mean	45°.5	57°.3	11°.8

The warm April and May of the present year enabled crops to be planted much earlier than usual, and in many instances the planting of corn was needlessly postponed to avoid killing back by the late frosts so usual in this latitude.

This early warm weather would have secured excellent crops had other climatic conditions been favorable. But the want of rain was as great as was its superabundance during the season of 1869, while the unusually high temperature greatly increased the evaporation.

The rain fall and evaporation from an open vessel, for April, May and June, the three months upon which most of our cereals are dependent for making a crop are as follows:

	Rain fall in inches.	Evaporation in inches.	Exc's of evaporation over rain fall.
April	0.18	3.50	3.32
May	1.05	3.69	2.64
June	1.92	5.57	3.65
Sums	3.15	12.76	9.61

The evaporation being four times the amount of rain fall, or upon each acre of surface of our lakes and streams 1,088 tons more water evaporated during the months mentioned, than fell upon the same extent of surface. If the evaporation from the surface of the soil were only one-half that from an open vessel, still for the time above given, 361 tons more water would be lost by this process alone, by each acre, than it would receive.

The drouth continued until July 17, when in four days—from the 14th to the 17th inclusive—4.44 inches of rain fell, which was more than had fallen since March 31.

These rains falling so rapidly could not be absorbed, so that much of the water was discharged into the brooks and rivers from the surface. The result was that while the fall of rain was abundant, the thirst of the ground was not satisfied, and crops were soon again suffering by drought, which lasted until August 18th, after which time there was sufficient rains, which with the warm weather of the latter part of August and September, ripened corn well and gave to grass lands a rank growth that afforded excellent pasturage. October was unusually warm, squash and tomato vines remaining green until the 21st, and in many places where partially protected, until the 31st inst.

The effect of so severe drought has been to diminish the yield of crops throughout the state, much below the average. Corn, which withstands severer droughts than other cereals, and which received great benefit from the late rains, is probably an exception to this general statement.

This injury is shown by the report of the Department of Agriculture, at Washington, for August and September. Reports of the wheat crop from ten counties in Wisconsin are given, only one of which—Milwaukee county—gives a "good yield," although the quality of the grain is universally good. Not one report of a good hay crop—except the yield of marshes—is given, and the total product of hay of all kinds is estimated at 15 per cent. below that of last year. Rye is deficient in yield, quality good. Oats are light both in yield and in quality of the grain. Potatoes are almost a failure, having had to contend with an unusual prevalence of the Colorado potato-beetle, as well as with the drought.

The three past seasons have all been different, yet all have in many respects, been unfavorable to the farmer. The summer of 1868 was hot, with a prolonged drought, beginning late in June. That of 1869 was so wet that land could not be well cultivated, and so cold that crops could not well grow. In 1870 again there is a severe drought, beginning early and continuing nearly through the growing season.

There is no probability that the climatic conditions of our State, or at least the southern half of it, will be essentially modified, through the agency of man, for a long series of years.

The proportion of land upon which timber is grown to that upon which there is no timber, is nearly that required by a country devoted to agriculture. If this proportion is changed at all it will be by clearing more land of its timber for purposes of cultivation. So far as this change affects the climate at all, it will only subject it to greater extremes of heat and cold, as well as of moisture and drought.

The question then arises—and it is one that demands the earnest consideration of all those interested in the welfare and prosperity of the State—can the injurious effects of the frequently occurring wet and dry seasons be modified? and if they can, what means must be used to bring about this desired change?

While there is no means of preventing the recurrence of these extremes of climate, and perhaps no means of modifying their effects that will be universal in its application, there is a remedy, general in its nature, which is within the reach of all farmers. It is the *adoption of a better system of culture.* Better and deeper plowing, better cultivating, and better manuring.

The stratum of soil needs to be deepened, to be more thoroughly pulverized and to be made richer. Any means that may be adopted that will accomplish these ends, will be of value as a remedy against drought.

There is another means of preventing the evil effects of both droughts and floods upon all clay lands or upon those having a clay subsoil, and which at the same time so increases the productiveness of the soil as to pay well for its adoption. It is underdraining. The effect of underdraining is to pulverize the soil by natural means to nearly or quite the depth of the drains, and by this deep pulverization the soil is enabled to successfully withstand droughts so severe as to ruin crops upon similar land undrained, while the drains beneath the surface form a ready means of escape for the surplus water of wet seasons. In the adoption of a thorough system of underdraining upon all heavy soils will be found the most effectual remedy, and the one most general in its application against such extremes as those of the past three seasons.

CASUAL PHENOMENA.

The following are some of the most important observations of Casual Phenomena :

November 16, 1869. Six inches of snow.
November 18, 1869. Six inches of snow. Good sleighing. **Last half of month resembles January.**
January 16, 1870. Thunder shower in evening. Barometer down to 28.1 inches. Violent wind from S. W. Thermometer sinks 42 degrees in ten hours.
March 24. Bluebirds, Robins and Meadow Larks appear.
April 12. Lakes Monona and Mendota free from ice.
April 27. Plum-trees in blossom.
May 1. Apple and cherry-trees beginning to bloom.
May 31. Ground dry and dusty to the depth of three feet. Crops suffering.
July 14. From 12 o'clock M. to 7 A. M. of the 16th—65 hours—4.28 inches of rain fell.
October 13. First frost, very slight.
October 21. Tomato and squash vines injured by frost.
October 31. Hard frost, all vines killed.

OBSERVATIONS.

The system adopted is that of the Smithsonian Institution, the hours of observation being 7 A. M., 2 P. M., and 9 P. M.

The temperature is given in degrees and tenths, F.

The amount of cloudiness is expressed by a number indicating the tenths of the sky overcast. The following abbreviations are used :

St.—Stratus.
Cu.—Cumulus.
Cir.—Cirrus.
Nim.—Nimbus.
Cu.-St.—Cumulo-stratus.
Cir.-St.—Cirro-stratus.
Cir.-Cu.—Cirro-cumulus.

The direction of the wind is taken for eight points of the compass, the figures accompanying represent the force on a scale from 1, a very light breeze, to 10, a most violent hurricane. In the summary of observations, the percentage of winds from each direction is given for each month.

The height of the barometer is indicated by inches and decimals, and corrected for the expansion above 32 deg.

The "force or pressure of vapor" expresses the weight of moisture in the air, by indicating in inches the height of a column of mercury that is sustained by it.

"Relative humidity" shows the per cent. of complete saturation existing at the time when the observation is made.

Latitude 43 deg.. 5 min. N.
Longitude 12 deg., 24 min. W.
Height above the sea 1,088 feet.

Maximum observed temperature for the year, 98 deg.
Minimum observed temperature for the year, 15 deg.
Range of observed temperature for the year, 113 deg.

W. W. DANIELLS,
Prof. of Agriculture and Analytical Chemistry.

MARCH, 1869.

Day of Month.	THERMOMETER IN THE OPEN AIR.				RAIN AND SNOW.			
	7 A. M.	2 P. M.	9 P. M.	Mean.	Time of beginning of rain or snow.	Time of ending of rain or snow.	Amount of rain or melted snow in gauge, in inches.	Depth of snow, in inches.
1	14.0	30.0	29.5	24.5	....	....	....	....
2	26.5	34.0	21.0	29.1	....	....	....	....
3	19.5	31.0	14.0	21.5	....	....	....	....
4	8.0	2.5	.½	2.0	....	....	....	....
5	4.0	15.5	5.1	5.6	....	....	....	....
6	8.0	5.1	6.0	1.3	....	....	....	....
7	10.0	25.0	22.0	19.0	*........	....	....	....
8	14.0	48.5	33.0	31.8	....	....	....	....
9	26.0	45.0	31.2	34.4	....	....	....	....
10	8.5	12.0	14.0	11.5	*........	....	....	....
11	4.0	15.0	11.0	10.0	....	....	....	....
12	12.0	27.0	21.0	20.0	....	....	....	....
13	9.0	28.0	28.0	21.6	†2 P. M.	10 P. M.	.100	2
14	20.0	17.0	15.0	17.3	....	....	....	....
15	6.0	14.0	8.0	9.3	....	....	....	....
16	-1.0	16.0	11.0	7.3	....	....	....	....
17	5.0	29.0	25.0	19.6	....	....	....	....
18	17.0	39.0	30.0	28.6	8 P. M.	....	....	....
19	30.0	37.0	32.0	33.0	....	7 A. M.	.210	3
20	31.0	35.0	31.0	32.3	....	....	....	....
21	34.0	34.0	25.0	31.0	....	....	....	....
22	25 0	33.0	34.0	20.6	....	....	....	....
23	30.0	46.0	38.0	27.3	....	....	....	....
24	38.0	43.5	41.0	39.0	4 P. M.	....	....	....
25	35.0	50.0	38.5	41.1	....	10 A. M.	180	....
26	36.0	42.0	39.0	39.1	....	....	....	....
27	33.0	53.0	48.0	44.9	9 P. M.	....	....	....
28	43.5	54.5	46.0	38.0	....	3 A. M.	.300	....
29	44.5	59.0	42.0	48.5	‡........	....	....	....
30	32.5	45.0	40.0	25.8	....	....	....	....
31	30.5	31.5	29.0	30.3	4 P. M.	....	....	....
Sum	......	......	......	766.3	....	....	.790	5
M'n.	......	......	......	25.54	....	....	....	....
Av..	......	......	......	......	....	....	....	....

* Slight snow storm. † Snow. ‡ Slight rain storm.

MARCH, 1869—continued.

CLOUDS.						WINDS.						
7 A. M		2 P. M.		9 P. M		7 A. M.		2 P. M.		9 P. M.		Day of Month.
Amount of cloudiness.	Kind of clouds.	Amount of cloudiness.	Kind of clouds.	Amount of cloudiness.	Kind of clouds.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
10	St....	1	Cu ...	5	Cu ...	S.W.	1	N.W.	3	S....	2	1
9	Cu-st .	1	Cu ...	0	......	N.W.	3	N.W.	3	N.W.	3	2
5	Cir...	10	Cu-st .	0	......	N.W.	3	W...	3	N W.	3	3
1	Cir st.	0	......	0	......	N.W.	3	N.W.	3	·N.W.	3	4
6	Cir-st.	9	Cir cu	10	Nim...	S.W.	3	S.W.	4	N.W.	4	5
0	......	0	......	0	......	N.W.	3	N.W.	3	W...	2	6
10	Nim .	5	Cir-cu.	0	......	S ...	3	S W.	3	W...	2	7
5	Cir-st.	1	Cir st.	0	......	S.W	2	S.W.	1	S...	2	8
5	Cir-cu	9	Cir st.	10	Nim .	S.W.	1	S W.	1	N.E .	3	9
10	Nim ..	1	St....	1	Cu ..	N.E .	3	N...	3	N ...	2	10
1	Cir-st.	1	Cir-cu.	0	......	N.E.	2	N.W.	2	N.W.	1	11
10	Nim ..	1	Cu ...	0	......	S ...	3	N.W.	3	N. W.	3	12
0	......	7	St....	10	Cu ...	S.W.	1	S.W.	3	S.W.	4	13
6	Nim ..	10	Nim ..	7	Nim ..	N.W.	3	N.W.	3	N.W.	3	14
3	Cir-st.	2	Cir ..	10	Nim .	N W.	4	N.W.	2	N.W.	2	15
0	......	1	St. . .	10	Nim..	N.W	3	W...	2	N.W.	2	16
10	St....	6	Cir.cu	0	......	W...	2	W...	1	N.W.	1	17
4	Cu ...	8	St....	10	St....	W..	1	S....	2	S....	4	18
10	Nim ..	10	Nim ..	10	Nim ..	S E.	2	S. E.	1	N ...	3	19
10	Nim ..	7	Cir st.	0	......	N...	3	N.E.	2	N.E.	1	20
9	St....	8	St....	6	St....	N.E.	2	N.E.	2	E....	2	21
6	St....	2	St....	6	St....	E...	1	E....	1	W...	2	22
0	......	0	......	0	......	W...	2	W...	2	W...	2	23
2	St....	1	Cir-cu.	2	Cir....	S.W.	1	S. E.	2	S. E.	1	24
1	St....	10	Cu-st .	10	Nim ..	S ...	1	E....	3	E ...	3	25
10	Nim ..	10	Cu-st .	0	......	E...	1	W...	1	N ...	1	26
1	Cir...	5	Cu ...	10	Nim .	W ..	1	S.E..	3	W...	3	27
10	Cu-st .	9	Cu st .	0	......	N ...	3	S.W.	3	S.W.	1	28
5	Cu-cir	10	Cu-st .	10	Nim .	S.W.	3	S.....	3	N ...	4	29
1	St....	5	Cir...	3	Cir.cu	N.W.	3	N.W.	3	N.W.	2	30
9	Cu-st .	10	Nim ..	10	Nim .	N.E.	2	N.W.	3	N.W.	3	31
....	......	....	......	....	......	......	...	......	...	......	...	Sum
5.4	......	5	......	4.5	......	.....	2	.....	2	......	2	M'ns
....	.. ...	4.9	......	....	......	......	....	......	2	......	....	Av.

MARCH, 1869—continued.

Day of month.	BAROMETER HEIGHT REDUCED TO FREEZING POINT.				FORCE OR PRESSURE OF VAPOR, IN INCHES.			RELATIVE HUMIDITY or FRACTION OF SATURATION.		
	7 A. M.	2 P. M.	9 P. M.	Mean.	7 A. M.	2 P. M.	9 P. M.	7 A. M.	2 P. M.	9 P. M.
1	28.839	28.793	28.735	28.789	.067	.130	.136	81	78	83
2	28.753	28.787	28.968	28.836	.117	.101	.129	82	51	88
3	29.074	29.014	28.934	29.007	.091	.082	.082	85	47	100
4	29.329	29.335	29.204	29.289	.031	.042	.042	100	86	100
5	28.921	28.591	28.741	28.751	.036	.080	.049	100	91	87
6	29.221	29.324	29.329	29.291	.031	.049	.057	100	87	100
7	29.118	29.066	29.021	29.068	.054	.100	.118	78	74	100
8	29.185	29.138	29.085	29.132	.082	.253	.168	100	74	89
9	29.092	28.914	28.971	28.992	.123	.160	.149	87	53	84
10	28.987	29.015	29.153	29.051	.057	.075	.082	88	100	100
11	29.128	29.090	29.038	29.085	.082	.070	.057	100	82	79
12	28.575	28.500	28.601	28.558	.075	.111	.064	100	75	56
13	28.719	28.643	28.541	28.634	.065	.117	.135	100	76	88
14	28.852	28.966	29.130	28.982	.059	078	.070	55	83	82
15	29.289	29.345	29.296	29.310	.045	.051	.062	76	63	100
16	29.262	29.201	29.131	29.198	.035	.074	.057	100	83	79
17	29.567	29.051	29.158	29.255	.002	.123	.117	4	77	87
18	29.117	29.036	28.932	29.028	.094	.079	.167	100	34	100
19	28.709	28.793	28.721	28.741	.167	.178	.181	100	81	100
20	28.807	28.910	28.988	29.003	.155	.183	.155	89	90	89
21	29.071	29.027	29.040	29.046	.196	.138	.117	100	71	87
22	28.996	28.890	28.991	28.958	.117	.131	.155	87	70	79
23	29.074	29.081	29.071	29.075	.148	.169	.165	89	54	72
24	29.217	29.070	29.124	29.137	.183	.202	.190	90	71	74
25	29.073	28.938	28.800	28.937	.183	.162	.228	90	45	95
26	28.670	28.661	28.644	28.658	.191	.237	.238	90	87	100
27	28.863	28.765	28.148	28.592	.168	.295	.285	89	73	85
28	28.163	28.648	28.694	28.501	.248	.355	.262	88	84	84
29	28.589	28.578	28.588	28.585	.258	.352	.199	88	70	74
30	28.888	28.930	28.988	28.932	.137	.138	.182	74	46	73
31	29.050	28.988	28.927	28.988	.142	.149	.160	84	84	100
Sum	....	....	....	....	......	......	......	....	....	....
M'n.	....	....	....	28.948	.111	.144	.138	90	72	87
Av.	....	....	....	....	......	.131	......	....	83	....

NOVEMBER, 1869.

THERMOMETER IN THE OPEN AIR.				RAIN AND SNOW.				
7 A. M.	2 P. M.	9 P. M.	Mean.	Time of beginning of rain or snow.	Time of ending of rain or snow.	Amount of rain or melted snow in guage, in inches.	Depth of snow, in inches.	Day of Month.
37.5	52.5	40.5	43.5	....	....	....	....	1
45.0	59.0	52.0	52.0	....	....	....	....	2
47.0	60.0	54.0	53.6	....	....	....	....	3
50.0	49.5	44.0	47.8	5 A. M.	6 P. M.	.160	....	4
34.5	38.0	32.0	34.8	....	....	....	....	5
28.5	36.0	30.5	31.6	*.........	....	....	....	6
20.0	28.0	24.0	24.0	....	....	....	....	7
24.0	28.5	27.0	26.5	....	....	....	....	8
28.0	33.0	30.0	30.3	....	....	....	....	9
24.5	37.0	29.0	33.5	6 P. M.	....	....	....	10
24.0	26.0	26.0	24.6	....	9 A. M.	.020	½	11
25.5	31.0	26.5	27.6	....	....	....	....	12
26.5	34.5	28.0	29.6	2 A. M.	10 A. M.	.120	....	13
28.0	33.0	28.0	29.6	....	....	....	....	14
27.5	34.5	33.0	31.6	....	....	....	....	15
32.0	33.0	32.0	32.3	1 A. M.	....	....	....	16
27.5	30.5	26.5	28.1	....	2 A. M.	.780	6	17
21.5	23.0	25.0	23.1	11 A. M.	....	....	....	18
25.0	30.0	25.0	26.6	....	9 A. M.	.690	6	19
16.0	24.5	25.0	21.8	....	....	....	....	20
14.0	24.0	21.0	19.6	....	....	....	....	21
25.0	30.0	29.0	28.0	3 P. M.	5 P. M.	....	½	22
27.0	29.0	22.0	26.0	....	....	....	....	23
11.0	25.0	23.0	19.6	....	....	....	....	24
25.0	32.0	27.0	28.0	....	....	....	....	25
29.0	31.0	28.0	29.3	....	....	....	....	26
25.0	31.0	22.0	26.0	....	....	....	....	27
18.0	31.0	32.0	27.0	2.30 P. M.	7 P. M.	.280	....	28
32.0	38.0	40.0	36.6	†.........	....	....	....	29
32.0	30.5	17.0	26.5	....	....	....	....	30
......	......	......	......	....	....	2.050	13.0	Sum
......	......	......	30.6	....	....	....	....	M'n.
......	......	......	......	....	....	....	....	Av.

* Slight snow storm.

† Dense Fog all day.

NOVEMBER, 1869—continued.

Day of Month.	CLOUDS.						WINDS.					
	7 A. M.		2 P. M.		9 P. M.		7 A. M.		2 P. M.		9. P. M.	
	Amount of cloudiness.	Kind of clouds.	Amount of cloudiness.	Kind of clou'ds.	Amount of cloudiness.	Kind of clouds.	Direction.	Force.	Direction.	Force.	Direction.	Force.
1	0	......	4	Cir...	2	Cu ...	S. W.	2	W...	1	S.W.	1
2	5	Cir-st.	5	Cir...	0	......	S.W.	1	S.W.	2	W...	3
3	6	Cir-cu.	10	Cu-st .	10	Nim. .	S.W.	2	S.W.	2	S.W.	3
4	10	Nim. .	10	Nim. .	5	Cu-st .	S. ..	2	W...	3	N.W.	5
5	7	St....	3	Cu....	0	......	W...	3	N.W.	3	W...	2
6	4	Cu-st .	5	Cu-st .	0	......	N.W.	3	N.W.	4	N.W.	3
7	1	St....	1	Cir. ..	0	......	N.W.	3	N.W.	3	N.W.	2
8	9	Cir-st.	10	Cir-st.	10	Nim. .	N.W.	1	N.W.	1	N.W.	2
9	10	Cu-st .	10	Cu-st .	2	Cir-st.	N.W.	2	N.W.	2	N.W.	3
10	4	Cir-cu.	9	Cu-st .	8	Cu....	N.W.	2	W...	3	N.W.	3
11	9	Nim. .	10	Cu-st .	8	Cu-st .	N....	3	W...	3	N....	3
12	10	Cir-st.	10	Cir st.	9	Cir cu.	W...	3	W...	3	W...	3
13	10	Nim. .	4	Cir cu	0	......	N....	3	N. E.	3	......	0
14	9	Cir–cu	7	Cir cu.	8	Cir-st.	N..E.	2	......	0	E....	1
16	9	Nim. .	5	Cir...	10	Cir-cu.	S....	2	S.E..	1	S.E..	1
15	10	Nim. .	10	Nim. .	10	Nim ..	N.E.	3	N.E.	3	N.E.	4
17	10	Nim ..	10	Cir-cu.	9	Cir...	N.W.	4	N.W.	4	W...	3
18	10	St.....	10	Nim..	10	Nim..	S.W.	3	S. E.	3	N..E	3
19	10	Nim ..	9	Cir...	0	......	N ...	5	N ...	5	N ...	3
20	1	Cir ...	10	Cir....	10	Cir...	N.W.	2	N.W.	2	N.W.	3
21	1	St....	1	Cir....	10	Nim..	S.W.	1	S ...	1	S. E.	2
22	10	Cu st .	10	Nim ..	10	Nim ..	S. E.	2	N..E.	1	N ...	3
23	10	St....	2	Cir...	0	......	N ...	3	N ...	2	N.W.	2
24	10	Nim ..	5	Cir...	0	......	E ...	1	S ...	1	S. E.	2
25	3	Cir-st..	10	Nim. .	0	......	S. E.	3	S ...	1	S ...	1
26	10	St....	10	Nim. .	10	Nim. .	S ...	1	W...	2	N.W.	2
27	10	St....	0	......	0	......	N.W.	3	N.W.	2	S.W.	2
28	0	......	10	Nim ..	10	Nim ..	S....	1	S.E..	1	S ...	2
29	10	Nim ..	10	Nim ..	5	Nim ..	S....	1	S....	1	S.W.	3
30	10	St....	9	Cir-st.	10	St....	N.W.	3	N.W.	3	N.W.	4
Sum	....	......	....	......	....	......	......	....	......	....	......	....
M'ns	7.6	......	7.3	......	5.5	......	......	2.3	......	2.5	......	2.4
Av.	....	......	6.8	......	....	......	......	....	......	2.4	......	....

NOVEMBER, 1869—continued.

BAROMETER HEIGHT REDUCED TO FREEZING POINT.				FORCE OR PRESSURE OF VAPOR, IN INCHES.			RELATIVE HUMIDITY OR FRACTION OF SATURATION.			Day of month.
7 A. M.	2 P. M.	9 P. M.	Mean.	7 A. M.	2 P. M.	9 P. M.	7 A. M.	2 P. M.	9 P. M.	
29.049	29.118	29.155	29.107	.143	.201	.139	66	51	56	1
29.111	29.238	28.949	29.110	.143	.190	.257	79	38	66	2
28.935	28.848	28.890	28.891	.249	.283	.282	77	54	67	3
28.696	28.556	28.744	28.665	.335	.265	.151	93	75	52	4
28.868	28.889	28.991	28.916	.149	.123	.143	74	54	79	5
29 034	29.030	29.118	29.060	.111	.115	.088	71	54	51	6
29 149	29.117	29.105	29.123	.108	.117	.111	100	73	86	7
29.041	28.975	28.985	29.000	.077	.147	.129	60	94	88	8
28.973	28.941	28.861	28.925	.153	.150	.148	100	80	89	9
28.930	28.903	28.977	28.936	.123	.157	.123	93	71	77	10
29.069	29.065	29 065	29.066	.129	.128	.123	100	87	87	11
29.030	28.969	28.972	28.990	.111	.136	.117	81	78	82	12
28.966	28.964	29.010	28.980	.123	.149	.135	82	74	88	13
29.130	29.074	29.062	29.088	.141	.145	.135	93	75	88	14
29.035	29.040	29.000	29 025	.123	.149	.150	82	74	80	15
28.863	27.621	28.422	28.634	.181	.168	.161	100	89	100	16
28.430	28.593	28.714	28.579	.123	.142	.135	82	84	93	17
28.717	28.588	28.518	28.607	.113	.123	.135	100	100	100	18
28.535	28.671	28.765	28.623	.135	.130	.117	100	78	87	19
28.729	28.881	28.981	28.985	.090	.111	.117	100	86	87	20
29.052	28.996	28.904	28.984	.082	.128	.118	100	100	100	21
28.704	28.723	28.849	28.759	.123	.148	.160	93	89	100	22
29.029	29.129	29.242	29.133	.147	.129	.101	100	82	86	23
29.342	29.299	29.222	29.287	.071	.117	.123	100	87	100	24
29.019	28.977	29.072	29.026	.123	.143	.129	93	79	88	25
29.152	29.129	29.142	29.141	.160	.136	.135	100	78	88	26
29.154	29.143	29.094	29.130	.117	.136	.101	87	78	86	27
28.957	28 802	28.760	28.839	.082	.174	.181	84	100	100	28
28.570	28.443	28.341	28.451	.123	.229	.182	69	100	78	29
28.693	28.748	28.999	28.813	.143	.124	.078	79	73	83	30
....	....	....	....	......	......	......	....	....	....	Sum
....	....	....	28.862	.133	.152	.140	91	74	83	M'n.
....	....	....	....	......	.141	......	....	82	....	Av.

DECEMBER, 1869.

Day of month.	THERMOMETER IN THE OPEN AIR.				RAIN AND SNOW.			
	7 A. M.	2 P. M.	9 P. M.	Mean.	Time of beginning of rain or snow.	Time of ending of rain or snow.	Amount of rain or melted snow in guage, in inches.	Depth of snow, in inches.
1	10.0	14.0	14.0	12.6				
2	14.0	14.0	12.0	13.3	10 A. M.	3 P. M.		¼
3	9.0	20.0	24.5	17.8				
4	35.0	28.0	23.0	28.6				
5	23.0	28.0	26.0	25.6				
6	21.0	30.0	28.0	26.3				
7	27.0	29.0	25.0	27.0				
8	15.0	27.0	26.0	22.6				
9	32.0	35.0	35.5	34.1	8 A. M			
10	35.0	39.5	34.0	36.1				
11	37.0	38.5	34.0	36.5		9 P. M.	1.02	
12	32.0	29.5	27.5	29.6				
13	25.5	26.5	25.0	25.6				
14	24.5	26.0	27.0	25.8	9 P. M.			
15	25.5	27.0	25.5	26.0		6 P. M.	.44	4
16	22.0	24.5	24.0	23.5				
17	21.0	21.5	15.0	19.1				
18	14.5	21.0	20.0	18.5				
19	9.0	14.0	8.0	10.3				
20	2.5	12.0	6.0	6.8				
21	3.0	14.5	17.0	11.5	11½ A. M.			
22	15.5	20.0	6.0	13.5		11½ A. M.	1.18	8
23	2.5	1.0	0	0.5				
24	0	23.0	22.0	15.0				
25	20.0	32.0	24.0	25.3				
26	22.0	35.0	25.0	27.0				
27	34.0	35.0	26.0	31.6				
28	22.0	24.0	18.0	21.3				
29	11.5	32.5	32.5	25.5				
30	25.0	35.5	28.0	29.5	*			
31	19.0	29.0	28.0	25.3				
Sum				691.7			2.64	12
M'n.				22.3				
Av.								

* Slight snow storm.

DECEMBER, 1869—continued.

CLOUDS.						WINDS.						
7 A. M.		2 P. M.		9 P. M.		7 A. M.		2 P. M.		9 P. M.		
Amount of cloudiness.	Kind of clouds.	Amount of cloudiness.	Kind of clouds.	Amount of cloudiness.	Kind of clouds.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Day of Month.
10	St....	10	Nim ..	10	Nim ..	N.W.	3	N.W.	2	N.W.	1	1
10	Cir st.	10	Nim ..	0	......	W. ..	3	N.W.	2	N.W.	2	2
9	Cir st.	9	Cir-st.	0	......	S....	2	S....	2	S....	3	3
10	Cir-st.	5	Cir st.	0	.....	S....	1	N.W.	4	N W.	1	4
8	St....	4	Cir-st.	0	......	S.E..	1	N.W.	2	N E .	1	5
2	St....	10	Nim ..	10	Nim ..	S....	1	S....	1	S W .	1	6
10	St....	10	Nim ..	0	.....	W. ..	1	W. ..	1	N.W.	1	7
0	......	9	Cir-st.	10	St....	S....	1	S....	2	S....	3	8
10	Nim ..	10	Nim ..	10	Nim ..	S....	3	S....	3	S....	3	9
10	Nim ..	10	Nim .	10	Nim ..	S....	2	S....	3	S....	3	10
10	Nim ..	10	Nim ..	10	Nim ..	E ...	2	N.E..	3	N E .	3	11
10	Cir-st.	10	Cu st .	10	Cu-st.	N.E..	3	W. ..	3	W. ..	3	12
10	Cu st .	10	Cu-st .	10	St....	N ...	3	N....	3	N ...	3	13
10	Cir-st.	10	Nim ..	10	Nim ..	W. ..	3	W. ..	3	N.E .	3	14
10	Nim ..	10	Nim ..	9	Cir-st.	N.E .	3	N.E .	3	N ...	3	15
10	Nim ..	9	Cir-st.	9	Cir-st.	W. ..	3	W. ..	3	W. .	3	16
10	Cir-cu.	10	Cir-cu	8	St....	W. ..	3	W. ..	3	W. ..	3	17
10	Cir-st.	9	Cu-st .	9	Cir-cu,	W. ..	2	W. ..	2	W. ..	3	18
5	Cir-cu.	3	Cir ...	8	Cir-cu.	N.W.	3	N.W.	3	N W.	3	19
2	St....	0	......	5	Cir...	N.W.	3	N.W.	2	N.W.	2	20
9	Cir-st.	10	Nim ..	10	Nim .	N.W.	2	N.W.	3	N.W.	3	21
10	Nim ..	2	Cir cu	0	.....	N.W.	4	W. ..	3	W. ..	3	22
0	......	8	Cir-st.	10	Nim ..	S W .	2	S.W .	3	S.W .	3	23
5	Cir-st.	4	Cir ..	0	......	S.W .	3	S.W .	3	S....	1	24
8	St....	3	Cir-cu.	0	......	S.E..	1	S....	2	S....	2	25
6	Cir ...	5	Cir-st.	0	......	S....	1	S....	1	S....	3	26
10	Nim ..	10	Cir st.	0	......	S....	1	S....	4	S....	3	27
10	Cir st.	1	Cu ...	0	......	W. ..	3	W. ..	2	S.W .	2	28
9	Cir-st.	10	Cir-st.	0	......	S.W .	3	S.W .	1	N.W .	3	29
0	......	0	......	0	......	S.W .	3	S.W .	3	S.W .	2	30
5	Cir-st.	5	Cir...	8	Cir...	N.W.	2	W. ..	2	N.W.	3	31
....	......	....	....	....	......	......	....	......	....	......	....	Sum
7.6	......	7.3	......	5.3	......	......	2	......	2	......	2	M'n.
....	......	6.7	......	....	......	......	....	......	2	......	....	Av..

DECEMBER, 1869—continued.

Day of Month.	BAROMETER HEIGHT REDUCED TO FREEZING POINT.				FORCE OF PRESSURE OF VAPOR, IN INCHES.			RELATIVE HUMIDITY or FRACTION OF SATURATION.		
	7 A. M.	2 P. M.	9 P. M.	Mean.	7 A. M.	2 P. M.	9 P. M.	7. A. M.	2. P. M.	9. P. M.
1	29.235	29.190	29.140	29.155	.068	.067	.082	100	81	100
2	29.078	29.076	29.158	29.104	.082	.094	.060	100	100	80
3	29.196	28.923	28.723	28.947	.065	.091	.105	100	85	86
4	28.598	28.867	28.943	28.802	142	.106	.106	70	58	80
5	29.565	29.133	29.110	29.236	.123	.135	.123	100	88	87
6	29.175	29.196	29.171	29.144	.113	.148	.153	100	89	100
7	29.252	29.259	29.341	29.280	.147	.142	.117	100	88	87
8	29.402	29.325	29.171	29.299	.086	.147	.123	100	100	87
9	28.996	28.858	28.772	28.875	.125	.162	.197	69	80	95
10	28.998	29.025	28.891	28.971	.183	.232	.191	90	95	90
11	28.689	28.559	28.711	28.653	.199	.223	.175	90	95	89
12	29.162	29.269	29.392	29.274	.143	.136	.141	79	83	93
13	29.478	29.466	29.455	29.466	.129	.135	.135	93	93	100
14	29.331	29.156	28.995	29.160	.123	.141	.129	93	100	88
15	28.762	28.514	28.516	28.597	.129	.129	.129	93	88	93
16	28.650	28.764	28.970	28.794	.101	.105	.111	86	80	86
17	29.033	28.993	28.949	28.992	.096	.107	.086	85	93	100
18	28.904	28.880	28.882	28.888	.076	.096	.108	81	85	100
19	28.930	28.954	29.046	28.976	.065	.067	.062	100	91	100
20	29.150	29.214	29.299	29.221	.042	.075	.057	86	100	100
21	29.283	29.049	28 775	29.028	.050	.076	.078	100	91	83
22	28.515	28.713	28.937	28.721	.080	.091	.037	91	85	100
23	29.063	29.171	29.172	29.135	.040	.030	.044	100	69	100
24	29.095	29.062	29.067	29.054	.044	.123	.084	100	100	71
25	29.210	29.202	29.204	28.685	.103	.179	.077	100	94	31
26	29.110	28.996	28.902	59.002	.118	.142	.135	100	70	100
27	28.557	28.674	28.824	28.865	.175	.142	.141	89	70	100
28	28.937	28.933	28.991	28.953	.101	.111	.082	86	86	84
29	28.891	28.760	28.806	28.819	.0[illegible]6	.175	.137	90	94	74
30	28.842	28.820	28.874	28.845	.100	.177	.117	74	85	76
31	28.860	28 851	28.819	28.843	.103	.142	.135	100	88	88
Sum	....	....	....	....	......	......	......	....	....	....
M'ns	....	....	....	28 993	.103	.126	.112	92	87	88
Av.	....	....	....	....	......	113	......	....	89	....

JANUARY 1870.

THERMOMETER IN THE OPEN AIR.				RAIN AND SNOW.				
7 A. M.	2 P. M.	9 P. M.	Mean.	Time of beginning of rain or snow.	Time of ending of rain or snow.	Amount of rain or melted snow in guage, in inches.	Depth of snow in inches.	Day of Month.
24.5	24.5	23.5	24.3	5 A. M.	5 P. M.	.45	3	1
20.0	25.0	23.0	22.6	....	....	....	....	2
14.0	24.0	19.5	19.1	....	....	....	....	3
15.5	24.5	15.0	18.3	....	....	....	....	4
6.0	27.0	30.0	21.0	*........	....	....	....	5
8.0	10.0	4.0	7.3	....	....	....	....	6
4.0	16.5	10.0	10.1	8½ A. M.	9 P. M.	.65	....	7
1.5	1.0	9.0	-2.1	....	....	....	....	8
-2.0	18.0	22.0	12.6	8 A. M.	12 P. M.	.4	4	9
23.0	30.0	23.0	25.3	....	....	....	....	10
17.5	34.0	33.0	28.1	11 A. M.	....	....	....	11
29.0	27.0	17.0	24.3	....	4 A. M.	.65	....	12
5.0	11.0	10.0	8.6	*........	....	....	....	13
19.0	23.0	25.0	22.3	4 P. M.	....	....	....	14
23.0	25.0	16.0	21.3	....	8 A. M.	.300	3	15
25.0	36.0	40.0	33.6	9½ A. M.	9 P. M.	.8	....	16
-2.0	-2.0	-10.0	-4.6	....	....	....	....	17
-12.0	5.0	7.0	0	....	....	....	....	18
8.5	26.5	22.0	19.0	....	....	....	....	19
24.0	21.5	10.5	18.6	....	....	....	....	20
4.0	11.5	16.0	10.5	....	....	....	....	21
32.0	34.0	32.0	32.6	....	....	....	....	22
7.0	12.0	9.0	9.3	....	....	....	....	23
10.5	26.0	17.0	17.8	....	....	....	....	28
23.5	35.0	22.0	26.8	....	....	....	....	25
15.0	17.0	10.0	14.0	....	....	....	....	26
14.0	20.0	11.0	15.0	....	....	....	....	27
24.0	35.0	30.0	29.6	6 P. M.	....	....	....	28
23.0	24.0	23.0	23.3	....	2 A. M.	.10	1	29
20.0	28.5	18.0	22.1	*........	....	....	....	30
25.0	26.5	14.0	21.8	*........	....	....	....	31
......	......	......	......	....	....	3.25	11	Sum
......	......	......	17.8	....	....	....	....	M'n.
......	......	......	......	....	....	....	....	Av..

* Slight snow storm.

JANUARY, 1870—continued.

Day of Month.	CLOUDS.						WINDS.					
	7 A. M.		2 P. M.		9 P. M.		7 A. M.		2 P. M.		9 P. M.	
	Amount of cloudiness.	Kind of clouds.	Amount of cloudiness.	Kind of clouds.	Amount of cloudiness.	Kind of clouds.	Direction.	Force.	Direction.	Force.	Direction.	Force.
1	10	Nim..	10	Cir st.	10	Nim..	N.W.	3	N.W.	3	N....	3
2	10	St....	0	......	10	Nim..	N.W.	3	N.W.	3	N.W.	3
3	9	Cir st.	10	Cir st.	0	......	N.W.	2	N.W.	3	N W.	3
4	9	Cu st.	9	Cir cu	10	Nim..	W...	3	W. ..	2	S.W.	3
5	4	St....	9	Cir-st.	0	......	S.W.	3	S.W.	3	S.W..	3
6	1	St....	0	......	10	Nim..	N.W.	4	N.W.	3	N.W.	3
7	9	Cir...	10	Nim..	3	Cir-st.	S.W.	3	S.W.	3	N.W.	3
8	1	St....	0	......	10	Nim..	N.W.	3	N.W.	3	N.W.	3
9	10	Cir st.	10	Nim..	3	Cir...	S.W.	4	S....	4	S....	3
10	8	St....	4	Cir...	10	Nim..	S.W.	3	W. ..	2	W. ..	1
11	9	Cu-st	10	Nim..	10	Cir-st.	S....	1	S.E..	1	S.E..	2
12	10	Cu-st.	10	Cir-cu.	9	Cir-st.	N.E.	3	N. ..	4	N....	4
13	2	Cir st.	9	Cir-st.	0	......	N. ..	4	N. ..	3	N....	2
14	10	Cir cu	10	Cir st.	2	Cir...	S.E..	3	S.E..	3	N.W.	3
15	10	Nim..	9	Cir st.	10	Nim..	N.W	1	N.W.	2	N.W.	1
16	10	St....	10	Nim..	0	......	S....	3	S....	2	S....	2
17	9	Cir. ..	2	Cir...	0	......	S.W.	4	S.W.	5	W. ..	3
18	0	......	0	......	0	.. ...	S.W.	3	S.W.	3	S.W.	3
19	0	......	1	Cir...	9	Cir cu	S.W.	3	S.W.	3	S.W.	1
20	3	Cir-cu	1	Cir...	1	St....	S.W.	1	N.W.	3	N.W.	2
21	1	St....	1	Cir st.	8	Cir-st.	W. ..	2	W. ..	2	W. ..	3
22	9	Cu-st.	10	Cir-st.	9	Cir-st.	S....	2	S.W.	2	N.W.	3
23	3	Cir-st.	1	Cir...	0	.....	N.W	3	N....	3	N.W.	2
24	10	Cir st.	1	Cir cu	0	.....	S.W.	2	S.E..	1	S.E.	2
25	8	Cu-st.	8	Cir-cu	0	......	S....	3	S.W.	3	W. ..	3
26	9	Cir-st.	2	Cir cu	2	St....	W. ..	2	W. ..	3	W. ..	2
27	10	St....	3	Cir-cu	0	......	S.W.	3	S.W.	3	S.W.	1
28	10	Cu st.	9	Cir-st.	10	Nim..	S....	3	S....	4	S....	3
29	10	Cir-cu	8	Cu-st.	0	......	S.W.	4	W. .	1	W. ..	2
30	10	Nim..	0	......	0	......	N.W.	3	N.W.	2	W. ..	1
31	10	Nim..	8	Cu-st.	1	St....	N.W.	2	N.W.	3	N.W.	3
Sum	....	......	....	.. ...	....	......	......	....	......	....	......	....
M'ns	72	......	56	......	4.4	......		2.7	......	2.7	......	2.5
Av.	....	......	5.7	......	....	......	......	....	......	2.6	......	....

JANUARY, 1870—continued.

BAROMETER HEIGHT REDUCED TO FREEZING POINT.				FORCE OF PRESSURE OF VAPOR, IN INCHES.			RELATIVE HUMIDITY, or FRACTI'N OF SATURATION.			Day of Month.
7 A. M.	2 P. M.	9 P. M.	Mean.	7 A. M.	2 P. M.	9 P. M.	7 A. M.	2 P. M.	9 P. M.	
28.885	28.845	28.817	28.849	.123	.123	.117	93	93	93	1
28.693	28.538	28.416	28.549	.091	.117	.089	85	87	72	2
28.460	28.607	28.733	28.608	.082	.111	.085	100	86	77	3
28.823	28.822	28.957	28.867	.080	.105	.055	91	80	64	4
28.994	28.810	28.847	28.850	.057	.129	.148	100	88	89	5
29.104	29.199	29.254	29.185	.034	.054	.052	54	78	100	6
29.010	28.785	28.895	28.896	.052	.068	.054	100	75	78	7
29.210	29.438	29.223	29.290	.040	.032	.029	85	70	100	8
28.999	28.726	28.679	28.874	.040	.051	.084	100	52	71	9
28.677	28.777	28.967	28.807	.123	.130	.123	100	78	100	10
28.889	28.755	28.835	28.826	.088	.175	.168	92	89	89	11
28.910	29.108	29.124	29.047	.142	.129	.078	88	88	83	12
29.271	29.306	29.293	29.290	.055	.057	.068	100	79	100	13
29.101	28.886	28.685	28.890	.103	.106	.117	100	86	87	14
28.550	28.624	28.835	28.669	.106	.117	.090	86	87	100	15
28.646	28.302	28.088	28.345	.135	.177	.248	100	85	100	16
28.404	28.733	29.131	28.756	.040	.040	.028	100	100	100	17
29.377	29.347	29.332	29.352	.026	.055	.045	100	100	76	18
29.213	29.093	29.075	29.127	.057	.117	.118	88	82	100	19
28.884	29.060	29.185	29.043	.129	.057	.074	100	79	83	20
29.274	29.246	29.118	29.222	.052	.057	.074	100	79	100	21
28.796	28.788	28.971	28.851	.180	.138	.162	100	71	89	22
29.157	29.233	29.153	29.181	.060	.075	.094	100	100	100	23
29.151	28.991	28.823	28.988	.062	.123	.084	89	87	71	24
28.569	28.458	28.701	28.586	.117	.063	.068	93	67	100	25
28.901	28.944	29.159	29.001	.082	.075	.068	100	70	100	26
29.139	29.142	29.145	29.142	.111	.142	.180	86	70	78	27
28.959	28.772	28.727	28.819	.111	.142	.130	86	70	78	28
28.721	28.867	28.911	28.833	.111	.111	.073	86	86	59	29
28.927	28.964	28.852	28.914	.075	.129	.082	70	82	84	30
28.746	29.076	29.058	28.960	.100	.117	.067	74	82	81	31
....	....	....	....	......	......	......	....	....	....	Sum
....	....	....	28.893	.086	.100	.090	91	78	90	M'n.
....	....	....	....	......	.092	....	....	86	....	Av.

On the morning of the 8th, parhelia first seen at 8½ o'clock, were visible until 10 o'clock. They were very bright, and about 14 degrees from the sun.

Lightning with rain on evening of 16th. At 9 P. M. the barometer stood at 28.100. About midnight a violent wind-storm, from the S. W. set in, accompanied with change of temperature; the wind continued strong until the evening of the 17th, and temperature to lower until the morning of 18th, when the thermometer stood—12 degrees.

Paraselenes evening of 17th. Parhelia during afternoon of 18th. Parhelia afternoon of 22 degrees. Aurora Borealis evening of 29th.

FEBRUARY, 1870.

Day of Month.	THERMOMETER IN THE OPEN AIR.				RAIN AND SNOW.			
	7 A. M.	2 P. M.	9 P. M.	Mean.	Time of beginning of rain or snow.	Time of ending of rain or snow.	Amount of rain or melted snow in guage, in inches.	Depth of snow in inches.
1	9.5	21.5	21.5	17.5	3 P. M.	5 P. M.	.20	2.0
2	10.0	22 0	17.0	16.3	*........	....	....	....
3	6.5	11.0	8.0	8.5	....	....	....	....
4	10.0	24 0	20.0	18.0	....	....	....	....
5	13.0	25.0	16.0	18.0	....	....	....	....
6	11.0	35.0	25.0	23.6	....	....	....	....
7	25.0	38.0	25.0	29.3	....	....	....	....
8	21.5	30.5	25.0	25.6	....	....	....	....
9	23.0	36.0	28.0	29.0	....	....	....	....
10	22.0	35.0	33.0	30.0	....	....	....	....
11	35.5	44.0	35.0	38.1	....	....	....	....
12	3.0	10.5	8.0	7.1	....	....	....	....
13	14.0	23.0	30.0	23.3	....	....	....	....
14	26.5	36.0	26.0	29.5	....	....	....	....
15	14.5	35.0	27.0	25.5	....	....	....	....
16	26.0	37.0	27.0	30.0	....	....	....	....
17	28.0	13.0	13.0	18.0	....	....	....	....
18	5.0	28.0	15 0	15.0	....	....	....	....
19	5.5	6.0	0.0	3.8	*........	....	....	....
20	-15.0	-4.0	-4.0	-7.6	....	....	....	....
21	-7.0	10.5	11.0	4.8	....	....	....	....
22	12.0	23.0	17.5	17.5	....	....	....	....
23	9.5	24.0	18.0	17.1	....	....	....	....
24	11.0	26.0	24.0	20.3	....	....	....	....
25	15.5	37.0	34.0	28.8	....	....	....	....
26	34.0	38.0	35.0	35.6	12½ A. M.	....	....	....
27	32.5	31.5	28.0	30.6	....	4 A. M.	1.15	....
28	24.0	27.0	25.0	25.6	*........	....	....	....
Sum	......	......	......	......	....	....	1.35	2
M'ns	......	......	......	20°.9	....	....	....	....
Av.	......	......	......	......	....	....	....	....

*Slight snow storm.

FEBRUARY, 1870—continued.

CLOUDS.						WINDS.						Day of Month.
7 A. M.		2 P. M.		9 P. M.		7 A. M.		2 P. M.		9 P. M.		
Amount of cloudiness.	Kind of clouds.	Amount of cloudiness.	Kind of clouds.	Amount of cloudiness.	Kind of clouds.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
9	St....	10	Cir-st.	10	Cu-st..	S ...	3	S ...	3	S.W.	1	1
1	St....	9	Cir-cu.	10	Nim ..	N.W.	3	N.W.	2	S.W.	1	2
9	Cir-st.	0	......	0	......	N.W	3	N ...	1	N ...	1	3
9	Cir-st.	3	Cir-st.	0	......	S.W.	3	S.W.	2	S W.	2	4
4	Cir-st.	0	......	0	......	S.W.	2	S.W.	1	W ..	1	5
0	......	0	......	0	......	S ...	1	S W.	1	S.W.	2	6
8	Cu-st..	3	Cir...	0	......	S.W.	2	S.W.	2	S.W.	2	7
10	Nim ..	10	Cir cu	5	Cir cu.	N.W.	2	N.W.	2	S.W.	2	8
9	Cir cu.	0	......	1	Cir....	N.W.	3	N.W.	3	N.W.	2	9
7	Cir st.	9	Cir st.	9	Cir cu.	S.W.	3	S..E.	3	S. E.	2	10
10	Cir-st.	5	Cir cu.	1	Cir....	S.W.	2	N.W.	2	S.W.	4	11
1	St....	1	St....	1	Cu ...	W ..	3	N.W.	3	W...	2	12
9	Cir cu.	1	Cu-st..	8	Cir....	S ...	3	S ...	3	S ...	2	13
10	Cir-st.	4	Cir-cu.	4	Cir-cu.	N.E.	2	N.E.	1	N.E.	2	14
3	St....	1	Cir....	0	......	N.W.	3	N.W.	2	N W.	2	15
10	Cir-st.	9	Cir-cu.	10	Nim ..	S ...	2	S.W.	3	S ...	3	16
10	Cir-st.	4	Cir-cu.	5	Cu ...	W ..	3	N.W.	2	N.W.	4	17
1	St....	1	Cir st.	10	Cir st.	S.W.	3	S.W.	2	W ..	2	18
10	Nim ..	8	Cir cu.	0	......	N.W.	5	N. W.	5	N.W.	3	19
0	......	0	......	0	......	N.W.	3	N.W.	3	N.W.	2	20
3	Cir....	4	Cir....	10	Nim ..	S..E.	2	S ...	3	S ...	3	21
8	Cir cu	8	Cir-cu.	0	......	S ...	3	S ...	2	S.E.	1	22
5	Cu-st .	5	Cir....	0	......	S.W.	3	S ...	2	S ...	3	23
1	Cir st.	0	.....	0	......	N.W.	3	W ..	2	S.W.	2	24
8	Cir-st.	6	Cir....	10	Nim ..	S.W.	2	S.W.	3	S.E.	2	25
10	Nim ..	10	Nim ..	10	Nim ..	S.E.	2	S..E.	3	S.E.	2	26
10	Cir-cu.	10	Cu-st .	8	Cu st	N ...	3	N.W.	3	N.W.	3	27
10	Cu-st .	8	Cir-cu.	10	Cir....	N.W.	3	N.W.	3	N.W.	3	28
....	......	....	......	....	......	......	....	......	....	......	....	Sum
6	......	4	......	4	......	......	2.6	......	2.4	......	2.2	M'n.
....	......	5	......	....	......	......	....	.....	2.4	......	....	Av.

FEBRUARY, 1870—continued.

Day of Month.	BAROMETER HEIGHT REDUCED TO FREEZING POINT.				FORCE OR PRESSURE OF VAPOR, IN INCHES.			RELATIVE HUMIDITY OF FRACTION OF SATURATION.		
	7 A. M.	2 P. M.	9 P. M.	Mean.	7 A. M.	2 P. M.	9 P. M.	7 A. M.	2 P. M.	9 P. M.
1	28.962	28.721	28.697	28.793	.059	.107	.107	89	93	93
2	28.962	29.046	29.103	29.037	.068	.118	.094	100	100	100
3	29.297	29.310	29.321	29.309	.051	.057	.062	87	79	100
4	29.272	29.197	29.164	29.211	.068	.094	.075	100	73	70
5	29.180	29.118	29.096	29.131	.078	.117	.090	100	87	100
6	29.059	29.005	29.046	29.036	.071	.127	.135	100	62	100
7	29.055	29.978	28.972	29.001	.135	.103	.135	100	45	100
8	28.962	28.911	28.810	28.904	.095	.161	.117	79	95	87
9	28.674	28.767	28.940	28.827	.123	.115	.135	100	54	88
10	28.967	28.839	28.516	28.774	.118	.142	.168	100	70	89
11	28.329	28.483	28.571	28.461	.136	.130	.071	65	45	35
12	28.920	29.088	28.946	28.982	.050	.062	.062	100	89	100
13	28.830	28.609	28.438	28.625	.082	.123	.167	100	100	100
14	28.382	28.451	28.724	28.519	.135	.191	.141	93	90	100
15	28.895	28.974	29.028	28.966	.076	.183	.147	91	90	100
16	29.031	28.908	28.881	29.040	.123	.136	.111	87	62	75
17	28.769	28.924	29.085	28.926	.135	.063	.078	88	81	100
18	29.036	28.856	28.737	28.876	.055	.117	.086	100	87	100
19	28.805	28.907	29.180	28.964	.049	.057	.044	87	100	100
20	29.307	29.290	29.295	29.297	.023	.036	.036	100	100	100
21	29.253	29.131	29.024	29.136	.032	.062	.071	100	89	100
22	28.909	28.865	28.828	28.867	.075	.123	.088	100	100	92
23	28.833	28.815	28.852	28.832	.059	.094	.098	89	73	100
24	28.888	28.914	28.906	28.902	.071	.105	.111	100	75	86
25	28.830	28.666	28.624	28.706	.080	.178	.155	91	81	79
26	28.817	28.225	28.125	28.389	.155	.144	.142	79	63	70
27	28.000	28.158	28.385	28.181	.175	.168	.153	94	95	100
28	28.623	28.807	28.864	28.764	.111	.111	.135	86	75	100
Sum	....	....	....	....	......	......	......	....	....	....
M'n.	....	....	....	28.871	.088	.117	.107	93	80	91
Av.	....	....	....	....		.104			88	

MARCH, 1870.

THERMOMETER IN THE OPEN AIR.				RAIN AND SNOW.				
7 A. M.	2 P. M.	9 P. M.	Mean.	Time of beginning of rain or snow.	Time of ending of rain or snow.	Amount of rain or melted snow in gauge, in inches.	Dep'h of snow in inches.	Day of month.
23.0	32.0	25.0	26.6	....	....	....	....	1
18.0	31.5	27.0	25.5	....	....	....	....	2
22.0	30.5	25.0	25.8	4 P. M.	11 P. M.	.200	2	3
23.5	29.0	27.0	26.5	....	....	....	......	4
25.0	32.0	26.0	27.6	11 P. M.	....	....	....	5
27.0	29.0	22.0	26.0	....	4 P. M.	.500	6	6
17.0	29.0	24.0	23.3	....	....	....	....	7
18.0	30.0	11.0	19.6	....	....	....	....	8
16.5	32.0	30.0	25.5	....	....	....	....	9
20.0	25.5	15.0	20.1	....	....	....	....	10
13.0	16.0	12.0	13.6	12 M.	....	....	....	11
6.0	15.0	13.0	11.3	....	....	....	....	12
16.0	26.0	21.0	21.6	....	12 P. M.	.500	6	13
16.0	30.0	28.0	24.6	....	....	....	....	14
29.0	8.0	3.0	13.3	7 A. M.	9 P. M.	.200	2	15
-8.0	9.0	16.0	5.6	....	....	....	....	16
19.0	33.0	30.0	27.3	....	....	....	....	17
17.0	37.0	26.0	26.6	9 P. M.	....	....	....	18
53.0	39.0	35.0	36.3	....	9 P. M.	1.070	....	19
35.0	35.0	34.0	34.6	....	....	....	....	20
27.0	35.0	33.0	31.6	....	....	....	....	21
30.0	36.0	34.0	33.3	In night.	7 A. M.	.100	1	22
24.0	35.0	28.0	29.0	....	....	....	....	23
29.0	38.0	33.0	33.3	....	....	....	....	24
34.0	42.0	39.0	38.3	11½ P. M.	....	....	....	25
38.0	36.0	33.0	35.5	....	10 P. M.	1.060	....	26
35.0	37.0	36.0	36.0	....	....	....	....	27
32.0	38.0	37.0	35.6	....	....	....	....	28
34.0	38.0	35.0	35.6	....	....	....	....	29
34.0	36.0	35.0	35.0	2 P. M.	3 P. M.	.050	....	30
34.0	36.0	36.0	25.3	7 A. M.	10 P. M.	.170	....	31
......	......	......	......	....	....	3.850	17	Sum
......	......	......	27.0	....	....	....	....	M'n

MARCH, 1870—continued.

Day of Month.	CLOUDS.						WINDS.					
	7 A. M.		2 P. M.		9. P. M.		7. A. M.		2 P. M.		9 P. M.	
	Amount of Cloudiness.	Kind of clouds.	Amount of Cloudiness.	Kind of clouds.	Amount of Cloudiness.	Kind of clouds.	Direction.	Force.	Direction.	Force.	Direction.	Force.
1	5	Cu St.	1	Cir-cu.	0	......	N.W.	3	W...	3	W...	3
2	1	St....	1	Cu...	0	......	W...	3	W...	3	W...	2
3	8	Cir-st.	8	Cu-st..	10	Nim...	S.E.	3	S.E.	3	S.E..	3
4	10	Cir- t.	9	Cu-st..	10	Cu st..	N.W.	3	N....	3	N.W.	2
5	5	Cir-st.	8	Cir-cu.	10	Nim...	N...	1	N.. .	1	N.E.	2
6	10	Nim ..	10	Nim ..	8	Cu....	N.E.	3	N.E.	2	N.E.	2
7	10	Nim ..	10	Cir-cu.	8	Cu....	N...	2	N W.	2	N.W.	3
8	1	St....	5	Cu....	10	Cu-st..	N.W.	1	N W.	3	S.W.	2
9	8	Cir-st.	5	Cir-st.	8	Cir cu.	S.W.	2	S.W.	2	S.W.	2
10	10	Cir-st.	8	Cir-st.	8	Cu....	N.W	3	N.W.	3	......	0
11	10	Cir-st.	10	Nim ..	10	Nim...	N.E.	3	N.E.	3	......	0
12	10	Nim ..	10	Nim ..	10	Nim. .	N...	4	N ...	4	N...	2
13	8	Cir cu.	1	Cir-st.	1	Cir-st.	N...	3	N.W.	2	N W.	1
14	8	Cir-st.	9	St....	10	Cir-st.	N.E.	2	S.E.	3	S.E.	3
15	10	Nim ..	10	Nim ..	10	St....	S E .	4	S. W.	4	S.. .	4
16	1	St....	4	Cir-st.	10	St....	S.E .	2	N...	3	N.W.	3
17	1	Cir...	0	......	0	......	N.W.	3	N.W.	2	N W.	1
18	1	Cir-st .	3	Cir-st.	8	Cir st.	N.W.	1	S.W.	2	S. ..	2
19	10	St ...	10	St....	10	Nim ..	S.. .	1	S....	2	S.. .	1
20	10	St....	10	St....	10	St....	S.E..	1	E. ..	1	N...	3
21	5	Cir-cu.	9	St....	0	......	N.W.	3	N.W.	1	N.W.	2
22	10	Cir cu.	9	Cir cu.	10	St....	N.W.	2	N.W.	3	W...	1
23	0	......	0	......	0	......	N.W.	2	......	0	N.E.	1
24	10	St....	10	Cir-cu.	0	......	S.E	2	S.E..	1	S.E.	3
25	10	Cir-st.	10	Cir-cu.	10	Nim ..	S.E .	3	S.E..	2	S.E.	1
26	10	Nim ..	10	Nim ..	10	Nim. .	......	0	......	0	N....	1
27	10	Nim ..	10	Cu-st .	10	St...	N.. .	3	N.. .	3	N....	2
28	7	Cu-st.	10	Cu....	0	......	N.W.	1	N.E.	1	... ..	0
29	10	Cir-st.	10	Cu....	7	Cu.. .	N.E.	1	N.E.	1	N.E.	1
30	10	Cir-cu.	10	Nim ..	10	Cu st.	N.E	1	N.E.	3	N.E.	3
31	10	Nim ..	10	Nim ..	10	Nim ..	N.E.	3	N.E.	2	N.E.	3
Sum	....	......	....	......	....	......	......	....	......	....	......	....
Mn's	7	......	7	......	7	......	......	2	......	2	......	2
Av.	....	......	7	......	....	......	......	....	......	2	......	....

MARCH, 1870—continued.

BAROMETER HEIGHT REDUCED TO FREEZING POINT.				FORCE OF PRESSURE OF VAPOR, IN INCHES.			RELATIVE HUMIDITY or FRACTION OF SATURATION.			Day of month.
7 A. M.	2 P. M.	9 P. M.	Mean.	7 A. M.	2 P. M.	9 P. M.	7 A. M.	2 P. M.	9 P. M.	
28.924	28.953	29.041	28.972	.106	.125	.100	86	69	74	1
29.145	29.172	29.184	29.167	.098	.112	.128	100	63	88	2
29.226	29.058	28.882	29.055	.084	.142	.135	71	84	100	3
28.916	29.043	29.211	29 056	.117	.087	.147	93	54	100	4
29.256	29.108	28.861	29.075	.100	.143	.141	74	79	79	5
28.856	28.802	28 874	28.844	.111	.142	.118	75	83	100	6
28.911	28.937	29.462	29.103	.094	.082	.111	100	53	86	7
29.088	29.057	29.056	29.067	.098	.130	.071	100	78	100	8
29.035	28.947	28.597	28.859	.084	.181	.130	91	100	78	9
28.923	28.986	28.761	28.890	.075	.129	.086	70	93	100	10
28.742	28.744	28.673	28.719	.078	.090	.075	100	100	100	11
28.584	28 376	28.379	28.479	.057	.086	.078	100	100	100	12
28.571	28 759	28.863	28.707	.074	.141	.113	83	100	100	13
28.920	28.851	28.760	28 843	.090	.130	.153	100	78	100	14
28.457	28.454	28 474	28.460	.160	.062	.050	100	100	100	15
28.575	28.765	29.876	28 705	.031	.065	.090	100	100	100	16
28.970	29.058	29.104	29.044	.103	.094	.130	100	50	78	17
29.148	29.113	29.043	29.101	.094	.116	.141	100	53	100	18
28.946	28.841	28 771	28.352	.168	.152	.183	89	63	90	19
28.538	28.549	28.741	28 609	.183	.196	.183	90	100	90	20
28.934	28.972	29.032	28.979	.129	.127	.150	88	62	80	21
29.082	29.216	29.327	29.208	.167	.149	.138	100	71	71	22
29.467	29.510	29.424	29.467	.129	.155	.135	100	89	88	23
29.372	29.314	29.194	29.293	.160	.103	131	100	45	70	24
29.073	28.938	28.933	28.948	.155	.199	.173	79	74	73	25
28.814	28.714	28.819	28.782	.229	.212	.168	100	100	89	26
28.672	28.690	28.798	28.720	.183	.178	.170	90	81	80	27
28.886	28.958	28.978	28.942	.162	.165	178	89	72	81	28
29.037	28.990	29.014	29.013	.155	.165	.162	79	72	80	29
28.986	28.923	28.948	28.952	.155	.191	.162	79	90	80	30
28.955	28.942	29.005	28.967	.196	.212	.212	100	100	100	31
....	....	....	....	......	......	......	....	....	....	Sum
....	....	....	28.934	.124	.138	.134	91	76	88	M'n.
....	....	....	....	......	.132	......	..	85	....	Av.

March 24th—first appearance of bluebirds, robins and meadow larks.
March 28th—wild geese appear.

APRIL, 1870.

Day of Month.	THERMOMETER IN THE OPEN AIR.				RAIN AND SNOW.			
	7 A. M.	2 P. M.	9 P. M.	Mean.	Time of beginning of rain or snow.	Time of ending of rain or snow.	Amount of rain or melted snow in guage, in inches.	Depth of snow in inches.
1	36.0	43.0	40.0	39.6	....	....	....	....
2	36.0	48.0	40.0	41.3	....	....	....	....
3	37.0	49.0	40.0	42.0	....	....	....	....
4	32.0	50.0	46.0	42.6	....	....	....	....
5	36.0	54.0	50.0	46.6	....	....	....	....
6	39.0	55.0	45.0	46.3	....	....	....	....
7	38.0	58.0	46.0	47.3	....	....	....	....
8	35.0	59.0	47.0	47.0	....	....	....	....
9	40.0	62.0	49.0	50.3	....	....	....	....
10	42.0	59.0	49.0	50.0	....	....	....	....
11	36.0	64.0	56.0	52.0	....	....	....	....
12	49.0	65.0	60.0	58.0	....	....	....	....
13	59.0	78.0	63.0	66.6	....	....	....	....
14	62.0	75.0	65.0	67.3	....	....	....	....
15	46.0	36.0	30.0	37.3	11 A. M.	12 M.	.07	....
19	25.0	36.0	32.0	31.0	....	....	....	....
17	30.0	43.0	36.0	36.3	....	....	....	....
18	34.0	48.0	45.0	42.3	....	....	....	....
19	41.0	56.0	51.0	49.3	....	....	....	....
20	44.0	58.0	52.0	51.3	....	....	....	....
21	46.0	61.0	51.0	52.6	....	....	....	....
22	49.0	69.0	56.0	58.0	....	....	....	....
23	56.0	78.0	63.0	65.6	....	....	....	....
24	55.0	63.0	44.0	54.0	4½ P. M.	7 P. M.	.035	....
25	38.0	57.0	46.0	47.0	....	....	....	....
26	43.0	67.0	58.0	56.0	....	....	....	....
27	56.0	66.0	64.0	62.0	11 A. M.	5 P. M.	.08	....
28	40.0	54.0	46.0	46.6	....	....	....	....
29	49.0	63.0	52.0	44.6	....	....	....	....
30	53.0	68.0	68.0	61.3	....	....	....	....
Sum	.....	.....	......	......	....	....	.185	....
M'n.	......	......	......	49°.7	....	....	....	....
Av.	......	......	......	......	....	....	....	....

APRIL, 1870—continued.

CLOUDS.						WINDS.						
7 A. M.		2 P. M.		9 P. M.		7 A. M.		2 P. M.		9 P. M.		
Amount of cloudiness.	Kind of clouds.	Amount of cloudiness.	Kind of clouds.	Amount of cloudiness.	Kind of clouds.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Day of Month.
10	Nim ..	8	Cu....	9	Cu....	N.E	2	N....	2	N....	2	1
8	Cir-cu.	1	Cir....	1	Cir....	N.E.	2	N....	3	N....	1	2
0	......	0	......	0	......	N.E.	1	N.E..	2	E....	1	3
0	......	0	......	0	......	N.E.	1	N.E.	1•	......	0	4
0	......	0	......	0	......	N.E.	1	N.E..	1	......	0	5
0	......	0	......	0	......	N.E.	1	N ...	1	E....	1	6
0	.....	0	......	0	......	E....	1	......	0	E....	2	7
0	......	0	......	0	......	N....	1	N.E.	1	N.E..	1	8
0	......	0	......	0	......	N.E.	1	E....	2	E....	1	9
1	Cir....	2	Cir....	10	Nim ..	E ...	1	E....	1	N....	1	10
10	F g...	1	Cir....	1	Cir....	W...	1	N.W.	2	W...	2	11
0	......	9	Cu....	10	St ..	S.W.	1	S....	3	S....	4	12
1	Cir....	0	......	0	......	S ...	4	S....	4	S....	3	13
4	Cu....	10	Cir-cu.	10	Cu....	S....	3	S....	4	S....	1	14
10	Nim ..	10	Cir-cu.	9	St....	S W.	3	S.W.	2	W..	2	15
2	Cir....	1	Cir....	8	Cir....	W...	1	W...	1	W ..	2	16
0	......	5	Cu....	10	Nim ..	N.W.	2	N.W.	2	N.W.	1	17
10	Cu-st..	1	Cu....	9	Cu....	N....	2	N....	1	.....	0	18
9	Cir-st.	4	Cu....	0	......	N.W.	1	N.W.	1	N.W.	1	19
3	Cir...	4	Cu....	3	St....	N.W.	3	N.W.	2	......	0	20
3	Cir-st.	1	Cu....	0	......	W...	1	......	0	E....	2	21
1	Cir....	0	......	0	......	S.E.	1	......	0	S.W.	1	22
0	......	1	Cir....	0	......	. . .	0	S....	1	S....	2	23
10	Cir st.	3	Cir....	10	Nim ..	......	0	N.E.	2	N ...	4	24
3	Cir....	0	......	0	......	N.E.	3	E....	2	E....	1	25
0	......	7	Cir....	0	......	S.E..	1	S.E.	1	S....	1	26
10	Cu-st..	10	Nim ..	0	.....	S....	1	S.W.	2	W...	3	27
0	......	0	......	0	......	N.W.	3	N.W.	1	E....	2	28
0	......	2	Cir....	0	......	N.W.	2	S.E.	1	S....	1	29
9	Cu....	1	Cu....	0	......	S.W.	1	S.W.	1	......	0	30
....	......	....	......	....	......	......	....	......	....	......	....	Sum
3.5	......	2.6	......	3	......	......	1.5	......	1.5	......	1.6	M'ns
....	....	3	......	....		......	....	......	1.5	......	...	Av.

APRIL, 1870—continued.

Day of month.	BAROMETER HEIGHT REDUCED TO FREEZING POINT.				FORCE OR PRESSURE OF VAPOR, IN INCHES.			RELATIVE HUMIDITY OR FRACTION OF SATURATION.		
	7 A. M.	2 P. M.	9 P. M.	Mean.	7 A. M.	2 P. M.	9 P. M.	7 A. M.	2 P. M.	9 P. M.
1	28.972	29.044	29.063	29.026	.191	.209	.203	90	75	82
2	29.041	29.033	29.078	29.050	.170	.143	.139	80	43	56
3	29.118	29.192	29.254	29.188	.116	.152	118	53	44	48
4	29.250	29.216	29.192	29.219	.125	.094	.125	69	26	40
5	29.212	29.181	29.136	29.176	.115	.157	.186	54	38	51
6	29.192	29.088	29.040	29.106	.131	.120	.182	55	28	61
7	29.050	29.016	29.054	29 040	.165	.203	.192	72	42	62
8	29.094	29.019	28.996	29.036	.162	.115	.156	80	23	48
9	28.967	28 941	28 987	28 965	.159	.125	.175	56	22	50
10	28.901	28.879	28.874	28.884	.177	.140	.297	66	28	85
11	28.993	28.986	29.010	28.996	.212	.176	.155	100	29	34
12	29.042	28.928	28.859	28.943	.175	.216	.203	50	35	39
13	28.721	28.600	28.682	28.667	.216	.550	.327	43	58	57
14	28.674	28.626	28.606	28.635	.312	.350	.359	56	40	58
15	28.704	28.877	28.888	28.817	.238	.186	.093	77	65	56
16	28.862	28.822	28.924	28.869	.117	.115	.088	87	54	49
17	28.920	28.842	28.853	28.871	.093	.142	.170	56	51	80
18	28.821	28.873	28.842	28.845	.155	.165	.204	79	49	68
19	28.811	28.741	28.728	28.760	.197	.211	.196	78	48	52
20	28.746	28.710	28.779	28.755	.196	.178	.282	68	37	73
21	28.759	28.801	28.781	28.747	.238	.209	.270	77	41	72
22	28.728	28 693	28.790	28.737	.247	.219	.155	71	31	34
23	28.902	28.938	28.938	28.924	.230	.278	.299	51	29	52
24	28.940	28.949	29.170	29.019	.195	.249	.241	68	44	84
25	29.302	29.289	29.259	29.273	.186	.173	.238	81	38	77
26	29.283	29.048	28.942	29.091	.164	.197	.229	59	30	47
27	28.765	28.669	28.699	28.711	.363	.407	.206	81	63	49
28	29.004	29.042	29.089	29.045	.139	.087	.221	56	21	72
29	29.113	29.100	28.935	29.049	.223	.137	.146	64	24	36
30	28.949	28.908	28.940	28.932	.244	.290	.299	60	42	52
Sum	....	....	....	....	......	......	......	....	....	....
M'n.	....	....	....	28.949	.191	.198	.205	67	39	57
Av.	....	....	....	....	......	.198	......	....	54	....

April 5th, first cries of frogs (Rana.)
April 12th, Lakes Mendota and Monona free from ice.
April 27th, Plum trees in blossom.

MAY, 1870.

THERMOMETER IN THE OPEN AIR.				RAIN AND SNOW.				
7 A. M.	2 P. M.	9 P. M.	Mean.	Time of beginning of rain or snow.	Time of ending of rain or snow.	Amount of rain or melted snow in guage, in inches.	Depth of snow, in inches.	Day of Month.
61.0	76.0	63.0	66.3	....	....	....	....	1
61.0	79.0	69.0	69.6	....	....	....	....	2
69.0	82.0	70.0	73.6	3½ P. M.	4½ P. M.	.04	....	3
61.0	79.0	69.0	69.6	6 A. M.	7½ A. M.	.26	....	4
58.0	82.0	66.0	68.6	Night.	9 P. M.	.37	....	5
54.0	55.0	51.0	53.3	3 P. M.	4½ P. M.	.04	....	6
49.0	55.0	51.0	51.6	....	....	....	....	7
51.0	64.0	59.0	58.0	....	....	....	....	8
52.0	62.0	49.0	54.0	....	....	....	....	9
45.0	59.0	52.0	52.0	....	....	....	....	10
51.0	57.0	51.0	53.0	....	....	....	....	11
51.0	64.0	57.0	57.3	....	....	....	....	12
59.0	72.0	60.0	63.6	....	....	....	....	13
66.0	78.0	65.0	69.6	....	....	....	....	14
69.0	81.0	68.0	72.6	....	....	....	....	15
68.0	76.0	70.0	71.3	....	....	....	....	16
64.0	85.0	75.0	74.6	....	....	....	....	17
65.0	77.0	71.0	71.0	....	....	....	....	18
63.0	73.0	67.0	67.6	....	....	....	....	19
72.0	68.0	61.0	67.0	2½ P. M.	10½ P. M.	0.10	....	20
58.0	71.0	61.0	63.6	4½ P. M.	9 P. M.	0.28	....	21
60.0	77.0	72.0	69.6	....	....	....	....	22
62.0	71.0	57.0	63.3	....	....	....	....	23
53.0	66.0	62.0	60.3	....	....	....	....	24
64.0	75.0	55.0	64.6	....	....	....	....	25
52.0	70.0	58.0	60.0	....	....	....	....	26
56.0	68.0	61.0	61.6	....	....	....	....	27
57.0	73.0	65.0	65.0	....	....	....	....	28
63.0	79.0	66.0	69.3	....	....	....	....	29
64.0	82.0	67.0	71.0	....	....	....	....	30
65.0	84.0	69.0	72.6	....	....	....	....	31
......		......	......	....	....	1.09	....	Sum
......	......	......	65.0	....			....	M'n.
......	......	......	......	....	....	....	....	Av.

MAY 1870—continued.

Day of Month.	CLOUDS. 7 A. M. Amount of cloudiness.	Kind of clouds.	2 P. M. Amount of cloudiness.	Kind of clouds.	9 P. M. Amount of cloudiness.	Kind of clouds.	WINDS. 7 A. M. Direction.	Force.	2 P. M. Direction.	Force.	9 P. M. Direction.	Force.
1	0	... ..	0	......	0	.....	......	0	S ...	2	S....	1
1	0	......	1	Cu ...	8	St....	S ...	1	S....	2	S....	2
3	0	......	5	Cu ...	6	Cu ...	S.W.	2	S....	3	......	0
4	10	Nim ..	2	Cu ...	0	......	S ...	3	S....	2	S .E.	2
5	8	Cu ...	2	Cir....	10	Nim ..	S..E.	1	S .E.	3	S....	5
6	7	Cu ...	10	Cu-st	10	Nim ..	S .E.	2	S....	2	S .E.	1
7	10	Cu-st..	10	Cu st .	0	......	N..E.	2	N.E.	3	N..E.	1
8	0	. ....	2	Cir. .	0	......	W...	2	N.W.	2	N.W	2
9	0	......	4	Cu ...	1	Cir...	W...	3	W...	3	W...	1
10	9	Cir-cu	5	Cu ...	1	Cir...	W...	1	N.W.	1	W..	3
11	8	Cu ...	7	Cu ...	3	Cir ..	N.W.	3	N ...	2	N ...	3
12	1	Cir...	3	Cu ...	0	......	N ...	3	N ...	1	N ...	1
13	0	......	0	......	0	......	W...	2	......	0	......	0
14	0	......	0	......	0	......	S W.	1	S.W.	3	S....	1
15	4	Cir ...	1	Cir ...	3	Cir ...	S ...	3	S.W.	4	S....	1
16	0	......	10	Cir-cu	1	Cir...	S ...	1	.... .	0	S....	1
17	1	Cir...	0	......	0	......	S. E.	2	S....	4	S....	4
18	0	......	2	Cir ...	2	St....	W ..	2	N.W.	2	......	0
19	10	Cu-st .	5	Cir cu.	4	St....	S.W.	3	......	0	S.W.	2
20	9	Cir-cu.	10	Cir-st .	10	Nim ..	S.W.	1	S.W .	1	E....	1
21	10	Nim ..	3	Cir-cu.	10	Nim ..	S. E .	3	S.E .	1	N.E.	3
22	3	Cir...	10	Cir cu.	3	St....	S.E .	3	S.E .	3	S.E .	1
23	10	Cir-cu.	2	Cir-cu.	10	St....	W ..	2	S.W.	4	W...	4
24	10	Cu ...	0	......	1	St....	W ..	2	N.W.	2	N.W.	1
25	1	Cir ...	9	Cu ...	2	St....	N.W.	1	S ...	2	E....	2
26	5	Cir-cu	8	Cu ...	0	......	N.E.	2	E ...	3	E....	2
27	1	Cir ...	0	......	0	......	N.E.	1	N.E	2	......	0
28	0	......	0	......	0	......	......	0	......	0	E....	1
29	0	......	0	......	0	......	E ...	3	S. E.	3	......	0
30	1	Cir ...	0	......	1	Cir...	S ...	1	S. E.	3	S. E.	3
31	0	......	1	Cu ...	1	Cir...	S. E.	1	S. E.	4	......	0
Sum.	....	......	....	......	....	......	......	....	......	....	......	....
M'ns	2.8	......	3.6	......	2.7	......	......	1.7	......	2.	......	1.6
Av.	....	......	3.0	......	....	......	.....	....	......	1.7	......	....

MAY, 1870—continued.

BAROMETER HEIGHT REDUCED TO FREEZING POINT.				FORCE OR PRESSURE OF VAPOR, IN INCHES.			RELATIVE HUMIDITY or FRACTION OF SATURATION.			Day of Month.
7 A. M.	2 P. M.	9 P. M.	Mean.	7 A. M.	2 P. M.	9 P. M.	7 A. M.	2 P. M.	9 P. M.	
29.073	28.997	28.994	29.021	.325	.273	.248	61	30	42	1
28.991	28.868	28.828	28.895	.297	.264	.219	55	27	31	2
28 793	28.721	28.709	28.741	.398	.355	.385	56	32	53	3
28.723	28.657	28.649	28.676	.442	.465	.496	83	47	70	4
28.649	28.486	28.449	28.541	.365	.425	.407	76	39	63	5
28 334	28.289	28 302	28.308	.282	.321	.296	67	74	79	6
28.391	28.482	28.620	28.497	.322	.275	.156	92	65	42	7
28.724	28.712	28 766	28.734	.196	.150	.165	52	25	33	8
28.828	28.778	28.770	28.792	.183	.101	.228	47	18	64	9
28.762	28.746	28 828	28.778	.228	.197	.257	76	40	66	10
28.815	28.731	28.933	28.826	.245	.216	.221	65	46	59	11
29.018	28.969	28.986	28.991	.270	.203	.242	72	54	52	12
29.028	28.998	29.001	29.009	.216	.370	.255	48	66	49	13
29.044	28.990	28.948	28.994	.294	.285	.272	47	30	44	14
28.940	28.858	28.845	28.881	.336	.335	.319	47	32	47	15
28.835	28 793	28.779	28.802	.380	.402	.385	56	45	53	16
28.811	23.739	28.787	28.779	.403	.384	.382	67	32	44	17
28.899	29.027	29.059	28.995	.251	.291	.250	41	31	33	18
29.136	29.092	29.077	29.101	.299	.342	.425	52	36	64	19
29.095	29.041	28.933	29.028	.489	.450	.442	62	67	83	20
29.012	29.016	29.046	29.024	.394	.193	.413	82	25	77	21
29.069	28.886	28.836	28.930	.396	.527	.422	76	57	54	22
28.798	28.746	28.813	28.785	.429	.280	.322	77	37	69	23
28.801	28.800	28.846	28.815	.295	.287	.284	78	45	51	24
28.838	28.792	28.800	28.810	.314	.350	.269	53	40	62	25
28.883	28.862	28.935	28.893	.308	.328	.309	79	44	64	26
28.998	28.972	28.916	28.962	.230	.261	.269	51	38	50	27
28.981	28.988	28.928	28.962	.350	.442	.330	75	55	53	28
28.933	28.883	28.886	28.900	.327	.240	.287	57	25	45	29
28.992	28.377	29.011	28.993	.285	.289	.308	48	26	46	30
29.025	28.985	29.027	29.012	.359	.262	.430	58	22	61	31
....	....	....	....	....	....	....	....	....	....	Sum
....	....	....	28.853	.319	.308	.312	62	39	55	M'n.
....	....	....	....	......	.313	......	....	52	....	Av..

May 1st—apple trees bursting into bloom.
May 2d—cherry trees bursting into bloom.
May 31st—exceedingly dry; crops suffering; grass maturing with a short, thin growth; ground dry and dusty to the depth of three feet.

Evaporation from an open vessel, 3.69 inches, being 2.6 inches in excess of rain fall.

JUNE, 1870.

Day of month.	THERMOMETER IN THE OPEN AIR.				RAIN AND SNOW.			
	7 A. M.	2 P. M.	9 P. M.	Mean.	Time of beginning of rain or snow.	Time of ending of rain or snow.	Amount of rain or melted snow in guage, in inches.	Depth of snow, in inches.
1	63.0	82.0	70.0	71.6				
2	66.0	85.0	71.0	74.0				
3	67.0	86.0	71.0	74.6				
4	68.0	67.0	62.0	65.3	10½ A. M.	12 M.	.31	
5	61.0	75.0	67.0	67.6				
6	62.0	71.0	59.0	64.0				
7	60.0	70.0	57.0	62.3				
8	54.0	65.0	57.0	58.6	4 P. M.	6 P. M.	.04	
9	53.0	59.0	55.0	55.6				
10	53.0	62.0	52.0	55.6				
11	53.0	65.0	59.0	59.0	7 P. M.	7½ P. M.	.03	
12	54.0	62.0	56.0	57.3				
13	54.0	60.0	60.0	58.0	10 A. M.	5 P. M.	.16	
14	59.0	68.0	64.0	63.6	6 A. M.	Mist		
15	59.0	71.0	67.0	65.6				
16	65.0	75.0	67.0	69.0				
17	66.0	80.0	73.0	73.6				
18	71.0	84.0	76.0	77.3				
19	76.0	87.0	77.0	80.0				
20	76.0	80.0	64.0	73.3				
21	60.0	77.0	61.0	66.0				
22	62.0	85.0	75.0	74.0				
23	75.0	88.0	81.0	81.3				
24	78.0	92.0	86.0	85.3				
25	81.0	93.0	83.0	85.6				
26	81.0	92.0	81.0	84.6				
27	83.0	78.0	78.0	79.3	1½ P. M.	2½ P. M.	.60	
28	80.0	91.0	81.0	84.0				
29	80.0	94.0	82.0	85.3				
30	84.0	98.0	75.0	85.6	5½ P. M.	6½ P. M.	.78	
Sum							1.92	
M'n.				71.2				
Av.								

JUNE, 1870—continued.

CLOUDS.						WINDS.						
7 A. M.		2 P. M.		9 P. M.		7 A. M.		2 P. M.		9 P. M.		
Amount of cloudiness.	Kind of clouds.	Amount of cloudiness.	Kind of clouds.	Amount of cloudiness.	Kind of clouds.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Day of Month.
0	......	0	......	0	......	......	0	......	0	S E..	1	1
0	......	0	......	0	......	......	0	S....	1	S.E..	1	2
0	......	2	Cir...	0	......	S.E..	1	S.E..	1	......	0	3
7	Cu-st .	9	Cu st .	0	......	W...	1	N.W.	2	W...	1	4
0	......	5	Cu ...	10	Cu-st .	N.W.	2	N.W.	2	S W.	1	5
5	Cu ...	7	Cu ...	2	Cir...	N.W.	3	W...	3	S W.	2	6
0	......	6	Cu ..	0	......	S.W .	1	S.W.	3	W...	2	7
5	Cir...	9	Cu ...	7	Cu ...	W...	1	......	0	N.W.	1	8
10	Cu st .	10	Cu ...	1	Cir...	N....	3	N.W.	3	N.W.	2	9
10	Cir...	5	Cu ...	1	Cir...	N....	2	W...	1	E....	1	10
4	Cu ...	6	Cu ...	1	Cir...	S.E..	1	N.E .	2	E....	1	11
10	Nim..	2	Cu ...	1	Cir...	N.E..	2	N....	3	N W.	3	12
10	Cu-st.	10	Nim ..	9	Cu-st .	N.W .	2	N.W.	3	N.W.	1	13
10	Nim..	10	Cu-st .	3	Cir...	N.W.	2	N.W.	3	N.W.	4	14
0	......	3	Cu ...	0	......	N.W.	3	N....	1	......	0	15
0	......	0	......	0	......	......	0	N.E..	3	N.E..	1	16
0	......	1	Cu ...	0	......	......	0	E....	1	E....	1	17
0	......	0	......	0	......	......	0	......	0	W...	1	18
0	......	0	.. ..	2	Cir...	......	0	W...	3	W...	2	19
0	......	0	......	0	......	W...	2	N....	2	E....	2	20
0	......	0	......	0	......	E....	2	E....	2	E....	2	21
0	......	0	......	0	......	......	0	E ...	1	......	....	22
0	......	0	......	1	St....	S....	1	S....	1	S....	1	23
0	......	1	Cu ...	1	St....	......	0	S....	2	......	0	24
0	......	1	Cu ...	2	Cu. ..	......	0	S.W .	2	S.W .	1	25
2	Cir-cu.	4	Cu ...	0	......	......	0	S.W .	2	......	0	26
0	......	10	Nim ..	9	Nim..	......	0	N.W.	3	......	0	27
0	......	4	Cu ...	2	Cu ...	......	0	S E..	2	S E..	3	28
0	......	4	Cu ...	2	Cu ...	S....	1	S.E..	2	S E..	2	29
0	......	3	Cu ...	4	Cu ...	S....	2	S.W .	4	N.E .	4	30
....	......	....	......	....	......	......	....	......	....	......	....	Sum
2.5	......	3.5	......	2.0	......	......	1	......	2	......	1.5	M'n.
....	......	2.6	......		......	......	....	......	1.5	......	....	Av.

JUNE, 1870—continued.

Day of month.	BAROMETER HEIGHT REDUCED TO FREEZING POINT.				FORCE OR PRESSURE OF VAPOR, IN INCHES.			RELATIVE HUMIDITY or FRACTION OF SATURATION.		
	7 A. M.	2 P. M.	9 P. M.	Mean.	7 A. M.	2 P. M.	9 P. M.	7 A. M.	2 P. M.	9 P. M.
1	29.065	29.016	28.972	29.017	.386	.355	.353	67	32	48
2	28.980	28.872	28.819	28.887	.407	.384	.436	63	32	57
3	28.780	28.721	28.843	28.848	.362	.443	.438	55	36	41
4	28.792	28.816	28.809	28.805	.509	.430	.491	75	61	88
5	28.821	28.852	28.839	28.837	.383	.350	.425	71	40	64
6	28.853	28.885	28.902	28.880	.376	.309	.296	69	41	59
7	28.951	28.396	28.961	28.936	.325	.234	.268	61	32	58
8	28.962	28.936	28.967	28.935	.288	.330	.350	70	53	75
9	28.884	28.861	28.855	28.867	.321	.249	249	80	51	59
10	28.794	28.737	28.739	28.757	.302	.276	.334	76	70	86
11	28.763	28.836	28.779	28.792	.476	.279	.191	70	46	27
12	28.812	28.765	28.745	28.774	.282	.284	.336	67	51	75
13	28.676	28.660	28.636	28.658	.372	.426	.426	78	82	82
14	28.601	28.650	28.743	28.664	.439	.349	.403	88	51	67
15	28.816	28.864	28.891	28.857	.358	.403	.425	73	54	64
16	29.004	28.998	29.036	29.012	.389	.554	.425	63	64	64
17	29.111	29.087	29.077	29.091	.407	.452	.476	63	44	59
18	29.118	29.076	29.037	29.077	.503	.433	.443	66	37	50
19	29.046	29.035	28.930	29.003	.477	.429	.492	54	33	53
20	28 924	28.895	29.051	28.956	.614	.487	.285	68	48	48
21	29.149	29.113	29.104	29.122	.229	.200	.325	44	21	61
22	29.144	29.082	29.072	29.065	.319	.350	.554	58	29	64
23	29.140	29.102	29 066	29.102	.628	.416	.474	73	31	45
24	29.114	29.046	29.067	29.075	.588	.727	.637	62	48	51
25	29.083	29.004	29.001	29.029	.664	.717	.677	62	64	60
26	29.008	28.956	28.968	28.977	.664	.680	.664	62	46	62
27	29.007	29.005	28.973	28.995	.759	.704	.704	67	73	73
28	28.976	28 886	28.877	28.913	.717	.651	.704	70	45	66
29	28.859	28.776	28.720	28.785	.717	.653	.691	70	41	63
30	28.649	28.563	28.611	28.607	.663	.694	.566	57	39	77
Sum	....	....	....	....	......	......	......	....	....	....
M'n.	....	....	....	28.911	.457	.444	.454	66	46	61
....	....	....	....	....	......	.451	......	....	57	....

Evaporation for June, 5.57 inches.

JULY, 1870.

THERMOMETER IN THE OPEN AIR.				RAIN AND SNOW.				
7 P. M.	2 P. M.	9 P. M.	Mean.	Time of beginning of rain or snow.	Time of ending of rain or snow.	Amount of rain or melted snow in guage, in inches.	Depth of snow inches.	Day of Month.
61.0	70.0	64.0	65.0					1
74.0	77.0	71.0	70.6					2
73.0	84.0	80.0	78.0					3
70.0	80.0	75.0	75.0					4
71.0	79.0	73.0	74.3					5
65.0	70.0	78.0	71.0					6
58.0	67.0	62.0	62.2	6 A. M.	8 A. M.	.65		7
59.0	72.0	66.0	65.6					8
68.0	86.0	72.0	75.3					9
69.0	79.0	68.0	72.0					10
66.0	78.0	69.0	71.0	7 P. M.	7½ P. M.	.16		11
66.0	83.0	70.0	73.0					12
67.0	76.0	69.0	70.6					13
60.0	76.0	77.0	71.0	12 M.		.70		14
66.0	82.0	75.0	74.3			2.30		15
75.0	84.0	80.0	79.6		7 A. M.	1.28		16
70.0	83.0	77.0	76.6	6 A. M.	7 A. M.	.16		17
76.0	87.0	81.0	81.3					18
79.0	80.0	70.0	76.3					19
76.0	81.0	72.0	76.3					20
70.0	80.0	72.0	74.0					21
72.0	90.0	82.0	81.3					22
80.0	91.0	82.0	84.3					23
70.0	85.0	77.0	77.3					24
74.0	78.0	72.0	74.6					25
80.0	91.0	78.0	83.0					26
76.0	79.0	75.0	76.6					27
73.0	77.0	69.0	73.0					28
59.0	67.0	63.0	73.0					29
63.0	74.0	67.0	68.0					30
71.0	83.0	74.0	76.0					31
						5.25		Sum
			73°.8					M'n.
								Av.

JULY, 1870—continued.

Day of Month.	CLOUDS.						WINDS.					
	7 A. M.		2 P. M.		9 P. M.		7 A. M.		2 P. M.		9 P. M.	
	Amount of Cloudiness.	Kind of clouds.	Amount of cloudiness.	Kind of clouds.	Amount of cloudiness.	Kind of clouds.	Direction.	Force.	Direction.	Force.	Direction.	Force.
1	10	Cu. ..	9	Cu.. .	0	.....	N ...	4	N. ..	4	N.E.	2
2	0	.....	0	....	0	......	N.E.	1	N. ..	1	N.E.	1
3	0	......	0	......	2	Cu. ..	S.. .	1	S. . .	1	......	0
4	1	Cu. ..	2	Cu.. .	1	Cu. ..	W. .	2	W...	3	W...	2
5	8	Cir cu	2	Cu.. .	6	Cir cu	......	0	W...	1	S.W.	2
6	6	Cir-cu	2	Cir cu	6	Cir-cu.	N.W.	3	.....	0	......	0
7	10	Nim. .	4	Cir-cu.	2	Cir cu	N ...	2	N.W.	2	N.W	2
8	0	......	3	Cir-cu.	0	......	N.W.	2	N.W.	1	N.W.	1
9	0	......	5	Cu.. .	6	Cu.. .	S.W.	3	S.W.	3	......	0
10	0	......	4	Cir-cu	3	Cir-cu	......	0	S. . .	3	S....	2
11	8	Cir–cu	6	Cir-cu.	9	Nim ..	S. ..	1	S W.	2	S.W.	2
12	0	......	0	......	0	......	S W.	3	W...	5	W...	1
13	8	Cu. ..	4	Cu...	0	......	S.W.	2	N.W.	3	N.E..	2
14	10	Nim ..	2	Cu.. .	10	Nim .	E...	2	N.E.	2	E....	4
15	10	Nim ..	6	Cir-cu	10	Nim ..	E...	2	E...	1	E....	1
16	10	Nim ..	5	Cir-cu	6	Cir-cu	S. ..	2	W...	2	......	0
17	10	Nim ..	6	Cir cu.	4	Cir-cu.	S. ..	1	S.W.	1	......	0
18	0	......	3	Cir-cu	7	Cir-cu	......	0	......	0	......	0
19	0	......	3	Cir-cu	9	Nim ..	......	0	E....	4	N.E.	5
20	0	......	4	Cir-cu.	0	......	E.. .	2	N W.	3	N.W.	2
21	0	......	4	Cir cu.	4	Cir-cu	.... .	0	E..	1	E...	2
22	5	Cir-cu.	4	Cu-st .	4	Cir-cu.	S.. .	2	S.W.	3	S.W.	1
23	0	......	8	Cu-st .	0	......	S. ..	2	S..	3	S....	1
24	7	Cir-cu.	9	Cu.. .	0	......	N.. .	2	W...	2	......	0
25	4	Cir-cu.	8	Cir-cu.	0	......	......	0	E...	2	......	0
26	0	......	0	......	10	Cu....	W. .	2	S.W.	3	W...	4
27	6	Cir-cu.	8	Cir-cu.	3	Cir-cu.	W. .	2	W. .	1	......	0
28	0	......	3	Cir-cu.	4	Cu-st .	W. .	2	N.W.	3	N.W.	3
29	0	Cir-cu.	4	Cir-cu.	0	......	N.. .	3	N.W.	3	N.E.	2
30	0	......	3	Cir-cu.	0	......	S.E.	1	S.E .	2	S.E .	1
31	2	Cir...	0	......	0	......	S.E..	[illegible]	S.E .	3	S.W.	1
Sum	....	.....	....	......	....	......	......	....	......	....	......	....
Mn's	3.5	......	3.4	......	3.3	......	......	1.6	......	2	......	1.4
Av.	....	......	4.4	......	....	......	......	....	......	1.6	......	....

JULY, 1870—continued.

BAROMETER HEIGHT REDUCED TO FREEZING POINT.				FORCE OR PRESSURE OF VAPOR, IN INCHES.			RELATIVE HUMIDITY or FRACTION OF SATURATION.			Day of Month.
7 A. M.	2 P. M.	9 P. M.	Mean.	7 A. M.	2 P. M.	9 P. M.	7 A. M.	2 P. M.	9 P. M.	
28.817	28.932	28.951	28.900	.473	.599	.373	88	59	62	1
29.024	28.997	29.000	29.007	.285	.291	.503	48	31	66	2
28.972	28 874	28.866	28.904	.310	.397	.382	63	34	37	3
28.883	28.795	28 829	28.835	.576	.251	.328	70	24	37	4
28.869	28.807	28.791	28.822	.371	.501	.476	49	51	59	5
28.840	28.866	28.795	28.833	.549	.516	.375	89	70	39	6
28.773	28.796	28.840	28.801	.452	.393	.423	94	59	88	7
28.902	28.912	28.891	28.901	.380	.358	.407	76	46	63	8
28.872	28.790	28.866	28.842	.4[illegible]1	.480	.489	60	39	62	9
28.901	28.866	28.842	28.869	.462	.813	.509	65	82	75	10
28.838	28.795	28.789	28.807	.570	.514	.635	89	54	90	11
28.838	28.801	28.793	28.810	.470	.376	.416	73	33	57	12
28.738	28 711	28.804	28.751	.591	.614	.496	89	68	70	13
28.839	28.843	28.788	28.8[illegible]6	.456	.568	.457	88	67	69	14
28.533	28.769	28.771	28.825	.612	.691	.745	90	63	86	15
28.745	28.807	28.867	28.806	.785	.789	.717	90	68	70	16
28.809	28.861	28.857	28.843	.717	.717	.717	70	64	77	17
28.904	28.908	28.898	28.903	.731	.748	.787	81	59	74	18
28.890	28.876	28 922	28.895	.731	.638	.482	74	62	66	19
28.783	28.885	28.968	28 879	.652	.585	.422	73	56	54	20
29.066	29.010	28.951	29.010	.482	.523	.422	66	51	54	21
28.849	28.814	28.837	28.833	.559	.464	.650	72	33	59	22
28.780	28.756	28.742	28.759	.638	.651	.610	62	45	56	23
28 882	28.845	28.909	28.879	.551	.775	.639	75	65	69	24
28.988	28.984	28.969	28.980	.641	.588	.631	77	62	81	25
28.959	28.904	28.963	28.942	.638	.782	.588	62	53	62	26
28.986	29.007	28.908	28.967	.614	.772	.628	68	78	73	27
28.901	28.878	28.947	28.908	.510	.422	.430	63	46	61	28
29.098	29.081	29.081	29.080	.380	.280	.416	76	56	72	29
29.150	29.138	29.068	29.118	.422	.402	.393	75	49	59	30
29.077	28.954	28.948	28.993	.537	.447	.539	71	40	65	31
....	....	....	....	......	......	......	...	...	...	Sum
....	....	....	28.888	.540	.549	518	73	54	65	M'n.
....	....	....	....	......	.535	......	...	64	...	Av

Evaporations for July, 6.55 inches.

AUGUST, 1870.

Day of Month	THERMOMETER IN THE OPEN AIR.				RAIN AND SNOW.			
	7 A. M.	2 P. M.	9 P. M.	Mean.	Time of beginning of rain or snow.	Time of ending of rain or snow.	Amount of rain or melted snow in gauge, in inches.	Depth of snow, in inches.
1	72.0	83.0	77.0	77.3	....	....	....	....
2	73.0	84.0	74.0	77.0	....	....	....	....
3	72.0	77.0	70.0	73.0	....	....	....	....
4	72.5	86.0	74.0	77.5	....	....	....	....
5	70.5	79.0	66.0	71.8	12½ P. M.	5½ P. M.	.25	....
6	68.0	73.0	68.0	68.3	....	....	....	....
7	62.0	61.5	61.0	61.5	in night.	12½ P. M.	.10	....
8	62.0	73.0	63.0	66.0	....	....	....	....
9	66.0	78.0	66.0	70.0	....	....	....	....
10	63.0	73.0	69.0	69.3	....	....	....	....
11	67.5	78.0	67.0	70.8	....	....	....	....
12	56.0	66.0	58.0	60.0	....	....	....	....
13	59.0	71.0	67.0	65.6	....	....	....	....
14	61.0	75.5	65.5	67.3	....	....	....	....
15	62.0	76.0	66.0	68.0	....	....	....	....
16	64.0	80.0	70.0	71.3	....	....	....	....
17	69.0	85.0	71.0	75.0	....	....	....	....
18	65.5	87.0	68.0	73.5	11 P. M.	....	....	....
19	58.0	61.0	57.0	58.6	....	8 A. M.	.92	....
20	56.0	68.0	61.0	62.6	....	....	....	....
21	62.0	71.0	64.0	65.6	....	....	....	....
22	62.0	80.5	75.0	72.5	....	....	....	....
23	67.5	81.5	76.0	75.0	in night.	7 A. M.	1.15	....
24	77.0	89.0	70.0	78.6	7½ P. M.	in night.	.48	....
25	60.0	66.0	61.0	62.3	....	....	....	....
26	59.0	71.0	61.0	63.6	....	....	....	....
27	58.0	74.0	64.0	65.3	7 P. M.	in night.	.68	....
28	69.0	82.0	76.0	75.6	10 P. M.	....	....	....
29	59.0	68.0	59.0	62.0	....	6 A. M.	.24	....
30	60.0	76.0	67.0	67.6	....	....	....	....
31	62.0	76.0	68.0	68.6	9½ P. M.	10 P. M.	.03	....
Sum	......	......	......	......	....	....	3.65	....
M'n.	......	......	......	67.1	....	....	....	....
Av.	......	......	......	......	....	....	....	....

AUGUST, 1870—continued.

CLOUDS.						WINDS.						
7 A. M.		2 P. M.		9 P. M.		7 A. M.		2 P. M.		9 A. M.		
Amount of cloudiness.	Kind of clouds.	Amount of cloudiness.	Kind of clouds.	Amount of cloudiness	Kind of clouds.	Direction.	Force.	Direction.	Force	Direction.	Force.	Day of month.
10	Cu ...	7	Cir-cu	1	Cir-cu	S.W .	1	S.W .	2	S. W	1	1
10	Cu ...	10	Cu ...	0	......	S.W .	1	S. W.	2	S. W.	2	2
0	......	0	......	0	......	N.W .	2	N.W .	4	N. W.	2	3
1	Cu-st .	0	......	4	Cu ...	N.W .	1	S. W.	3	S. W.	2	4
6	Cu ...	6	Cu ...	0	......	S.W .	3	N.E..	2	......	0	5
1	St....	10	Cu ...	10	Cu ...	N.W .	3	S. W.	2	S. W.	1	6
10	Nim...	10	Cu ...	10	Cu ...	N.....	3	N.E..	2	N.E..	1	7
10	Cu ...	10	Cu ...	0	......	S.W..	2	S. W.	2	.....	0	8
2	Cir-st.	7	Cir-cu	2	Cir-st..	S.W..	2	S. W.	3	S. W.	2	9
10	Cu-st .	2	Cu ...	1	Cu....	......	0	......	0	S. W.	1	10
9	Cir-st.	10	Cu ...	10	Cu....	S. W .	1	S. W.	2	N. W.	3	11
10	Cir-cu	10	Cu ...	10	Cu ...	N.....	3	N. W.	3	N. W.	2	12
10	Cu-st .	2	Cu ...	0	......	N	1	N. W.	2	......	0	13
0	......	5	Cu....	0	......	N.W..	2	N. W.	2	......	0	14
0	......	2	Cu....	0	......	......	0	N	1	.....	0	15
10	Cu....	2	Cu ...	0	......	N. W.	3	W ...	3	S.W..	2	16
0	......	3	Cir....	0	......	S. W.	4	S. W .	4	W....	1	17
5	Cu ...	10	Cu ...	10	Cu ...	W....	1	S	4	E	2	18
10	Nim...	4	Cu ...	0	......	N.W .	4	N.W .	4	......	0	19
0	......	10	Cu ...	6	Cu....	N.W .	2	N	1	......	0	20
10	Cu-st .	10	Cu ...	2	Cu-st .	N	2	N	1	E	3	21
10	Cu ...	10	Cu....	5	Cu....	S.E ..	2	S	3	S	3	22
10	Nim...	10	Cu ...	0	......	......	0	S. W	2	......	0	23
2	Cu ...	2	Cu ...	10	Nim..	S. W.	2	S. W.	3	S. W.	2	24
5	Cir-cu	2	Cir ...	0	......	N. W.	4	N. W.	2	N. W.	2	25
0	......	1	Cir ...	0	......	......	0	N	1	E	2	26
0	......	8	Cir ...	9	Nim...	S. E..	1	S.E ..	2	.....	0	27
7	Cir-cu	5	Cir-cu	5	Cu....	S	3	S. W.	3	S	4	28
8	Cir-cu	1	Cu ...	0	......	N. W.	3	W....	4	......	0	29
0	......	7	Cu....	0	......	S. W.	3	S. W.	3	S. W.	1	30
0	......	2	Cir...	10	Ca....	S	1	S	1	S....	1	31
....	......	....	......	....	......	......	....	......	....	......	....	Sum
5	......	6	......	3	......	......	2	......	2	......	1	M'n.
		4.6	......	....	......	......	....	......	1.6	......	....	Av .

AUGUST 1870—continued.

Day of Month.	BAROMETOR HEIGHT RECUCED TO FREEZING POINT.				FORCE OF PRESSURE OF VAPOR, IN INCHES.			RELATIVE HUMIDITY or FRACTION OF SATURATION.		
	7 A. M.	2 P. M.	9 P. M.	MEAN.	7 A. M.	2 P. M.	9 P. M.	7 A. M.	2 P. M.	9 P. M.
1	28 975	28.894	28.874	28 914	.552	.514	.717	70	45	77
2	28.899	28.805	28 832	28.845	.648	.663	.680	70	57	81
3	28 943	28 952	28.937	28.944	.422	.489	.358	54	75	48
4	28.957	28.888	28.849	28.998	.442	.413	.396	59	34	48
5	28.827	28.709	28.832	28.790	.442	.501	.570	59	51	89
6	28.848	28.895	28.919	28.887	.409	.469	.529	70	57	75
7	28.940	28.897	28.877	28.908	.491	.466	.473	88	85	88
8	28.857	28.898	28.941	28 898	.505	.545	.446	94	67	77
9	28.983	29.007	29.008	28.999	.438	.478	.470	68	50	73
10	29.087	29.056	29.048	29.068	.471	.402	.496	81	45	70
11	29.078	29.028	29.066	29.057	.550	.478	.556	82	50	84
12	29 233	29.194	29.185	29.203	.302	.346	.365	66	54	76
13	29.133	29.041	29.044	29.072	.380	.309	.489	76	41	75
14	29.072	29.054	29.070	29.064	.413	.350	.383	77	40	61
15	29.080	29 038	28.973	29.028	.460	.305	.376	83	34	59
16	28.86[illegible]	28.819	28.734	28.811	.403	.452	.416	67	44	57
17	28.567	28.557	28.768	28.597	.462	.909	.436	65	75	57
18	28.727	28.663	28.657	28.682	.542	.543	.648	87	42	95
19	28 773	28.934	29.092	28.899	.423	.297	.268	83	55	58
20	29.249	29.223	29.219	29.280	.308	.261	.314	69	38	53
21	29.257	29.238	29.208	29.234	.339	.682	.373	72	90	62
22	29.152	29.059	28.890	29.033	.370	.286	.449	66	38	52
23	28.902	28.709	28.709	28.767	.611	.738	.731	97	69	81
24	28.725	28.613	28.701	28 679	.717	.637	.658	77	47	90
25	28.880	28.999	29.136	29 005	.388	.265	.297	65	42	55
26	29.253	29.203	29.156	29.204	.323	.340	.383	65	45	71
27	29.116	29.018	28.956	29.030	.372	.393	.529	78	48	89
28	28.766	28.687	28.577	28.676	.635	.731	.812	90	67	91
29	28.671	28.773	28 845	28.763	.469	.261	.352	94	38	70
30	28.863	28.785	28.778	28.809	.338	.436	.489	65	49	75
31	28.854	28.842	28.817	28.834	.429	.436	.509	77	49	75
Sum	....	....	....	....	......	......	......	....	....	....
M'ns	....	....	....	28.926	.458	.464	.482	72	52	71
Av.	....	....	....	....	......	.466	......	....	65	....

SEPTEMBER, 1870.

THERMOMETER IN THE OPEN AIR.				RAIN AND SNOW.				
7 A. M.	2 P. M.	9 P. M.	Mean.	Time of beginning of rain or snow.	Time of ending of rain or snow.	Amount of rain or melted snow in guage, in inches.	Depth of snow, in inches.	Day of Month.
65.0	72.0	63.0	66.6	......	......	......	......	1
58.0	64.0	68.0	60.6	7 A. M.	9½ P. M.	.11	......	2
59.0	58.0	56.0	57.6	1 P. M.	3 P. M.	1.03	......	3
56.0	66.0	58.0	60.0	......	......	......	......	4
54.0	66.0	60.0	60.0	1½ P. M.	8 P. M.	.18	......	5
64.0	77.0	70.0	70.3	......	......	......	......	6
70.0	83.0	73.0	75.3	......	......	......	......	7
68.0	71.0	66.0	68.3	12½ P. M.	......	......	......	8
65.0	69.0	63.0	65.6	......	9 A. M.	1.05	......	9
62.0	72.0	61.0	65.0	......	......	......	......	10
59.0	69.0	58.0	61.6	......	......	......	......	11
55.0	68.0	59.0	60.6	......	......	......	......	12
57.0	75.0	65.0	66.6	10 P. M.	......	......	......	13
62.0	73.0	68.0	67.6	......	......	......	......	14
65.0	70.0	67.0	67.3	......	2½ P. M.	.40	......	15
64.0	65.0	63.5	64.1	......	......	......	......	16
60.0	69.0	60.0	63.0	......	......	......	......	17
59.0	67.0	60.0	62.0	......	......	......	......	18
56.0	69.0	59.0	61.3	......	......	......	......	19
56.0	72.0	62.0	63.3	......	......	......	......	20
59.0	76.0	66.0	67.0	......	......	......	......	21
64.0	76.0	69.0	69.6	6 P. M.	......	......	......	22
67.0	66.0	64.0	65.6	......	......	......	......	23
60.0	65.0	61.0	62.0	......	Night.	.96	......	24
60.0	70.5	65.0	65.1	......	......	......	......	25
60.0	72.0	63.0	65.0	......	......	......	......	26
62.0	72.0	63.0	65.6	......	......	......	......	27
59.0	71.0	63.0	64.3	8 P. M.	Night.	.27	......	28
61.0	69.0	62.0	64.0	......	......	......	......	29
59.0	71.0	62.0	64.0	......	......	......	......	30
......	......	......	......	......	......	4.00	......	Sum
......	......	......	61.2	......	......	......	......	M'n.
......	......	......	......	......	......	......	......	Av.

SEPTEMBER, 1870—continued.

Day of Month.	CLOUDS.						WINDS.					
	7 A.M.		2 P.M.		9 P.M.		7 A.M.		2 P.M.		9 P.M.	
	Amount of cloudiness.	Kind of clouds.	Amount of cloudiness.	Kind of clouds.	Amount of cloudiness.	Kind of clouds.	Direction.	Force.	Direction.	Force.	Direction.	Force.
1	10	Cir-cu	5	Cu ..	0	......	N.W.	2	N.W.	1	......	0
2	10	Cu-st.	2	Cu ...	1	Cir...	N.W.	1	N.W.	1	......	0
3	10	Cu-st.	10	Nim.	3	Cir...	N.E..	1	N.E..	1	E....	2
4	0	......	2	Cu ...	1	Cir...	N.E..	2	......	0	E....	2
5	2	Cir...	10	Nim.	10	Nim.	S.E..	2	S.E..	1	S.E..	2
6	0	......	5	Cir...	3	Cir...	S.E..	3	S.E..	1	S....	1
7	2	Cir...	3	Cir...	1	Cir...	S....	1	S....	3	S....	1
8	9	Cir-st.	10	Nim.	10	Nim.	S.W.	1	S.W.	1	......	0
9	10	Nim.	10	Cu-st.	9	Cir-cu.	......	0	N.W.	2	......	0
10	5	Cir...	5	Cir-cu	4	Cir...	N.E.	1	N.E..	1	N.E..	1
11	2	Cir...	3	Cir-cu	0	......	N.E.	1	N.E..	2	E....	2
12	2	Cir...	1	Cir...	0	......	......	0	E....	2	E....	1
13	2	Cir..	3	Cir...	10	St....	......	0	E....	2	E....	1
14	10	Nim.	10	Cu ...	10	Nim.	E....	1	S.E..	2	S.E..	1
15	10	Nim.	10	Nim.	2	Cir...	S.E.	1	S.E..	2	E....	1
16	10	Cu st.	10	Cu st.	10	Cu-st.	N.E..	2	N.E..	2	N.E..	2
17	10	Cu-st.	3	Cu ...	0	......	N.E..	2	N.E..	1	E....	2
18	3	Cu ...	1	Cu ...	3	Cu ...	N.E..	3	N.E..	1	N.E..	1
19	2	Cu-st.	3	Cir...	0	.....	N.E..	1	E....	1	E....	2
20	10	Cu-st.	5	Cu ...	0	....	E....	1	S.E..	2	S.E..	1
21	1	Cir-st.	5	Cu ...	1	Cir...	S.E..	1	S....	1	.....	0
22	6	Cir-st.	9	Cir cu	10	Nim.	S....	2	S....	3	S....	1
23	10	Nim.	10	Nim.	10	Nim.	......	0	S....	1	E....	1
24	10	Nim.	10	Nim.	10	Nim.	N.E..	2	N.E..	1	N.E..	1
25	10	Cir ...	4	Cu ...	2	Cir-cu	......	0	......	0	E....	1
26	2	Cir ...	9	Cir-cu	9	Cu ...	......	0	E....	1	......	0
27	1	Cir ...	1	Cu ...	0	......	......	0	E...	1	E....	1
28	0	......	5	Cir-cu	10	Nim.	E....	1	N.E..	2	......	0
29	9	Cir-cu.	8	Cu ...	0	......	N.E.	1	N.E..	1	N.E..	2
30	10	Nim.	4	Cu ...	0	......	N.E.	2	N....	2	......	0
Sum	....	......	....	......	....	......	......	....	......	....	......	...
M'ns	6	......	6	......	4	......	......	1	......	1.5	......	1
Av..	....	......	5.3	......	....	......	......	....	......	1.2	......	...

SEPTEMBER, 1870—continued.

BAROMETER HEIGHT REDUCED TO FREEZING POINT.				FORCE OF PRESSURE OF VAPOR IN INCHES.			RELATIVE HUMIDITY or FRACTION OF SATURATION.			Day of Month.
7 A. M.	2 P. M.	9 P. M.	Mean.	7 A. M.	2 P. M.	9 P. M.	7 A. M.	2 P. M.	9 P. M.	
28.790	28.826	28.884	28 833	.516	.559	.416	84	72	72	1
28.899	28.873	28.804	28.858	.483	.373	.396	100	62	76	2
28.837	28.772	28.807	28.805	.410	.423	.420	82	88	94	3
28.878	28.900	28 955	28.911	.363	.570	.452	81	89	94	4
29.051	28.954	28,987	28.997	.369	.438	.456	90	68	88	5
28.891	28.812	28.896	28.866	.497	.678	.658	83	73	90	6
28.973	28.962	28.965	28.966	.621	.677	.581	85	60	72	7
29.028	29.077	29.093	29.066	.577	.644	.570	85	86	89	8
29 102	29.136	29.143	29.127	.549	.430	.386	89	61	67	9
29.180	29.166	29.174	29.173	.312	.358	.390	56	46	74	10
29.204	29.172	29.187	29.187	.394	.313	.229	82	45	47	11
29.219	29.174	29.152	29.181	.383	.326	.296	90	48	59	12
29.131	29.054	29.129	29.104	.378	.484	.389	81	56	63	13
29.131	28.976	28.956	29.021	.491	.552	.612	88	70	90	14
28.959	28.939	28.972	28.956	.583	.621	.591	94	85	89	15
29.031	29.071	29.122	29.084	.550	.516	.503	82	84	86	16
29.193	29.194	29.205	29.197	.456	.430	.456	88	61	88	17
29.279	29.251	29.154	29.228	.380	.303	.310	76	46	60	18
29.246	29.198	29.155	29.200	.363	.367	358	81	52	73	19
29.158	29.103	29.085	29.115	.398	.422	.460	90	54	83	20
29.119	29.062	29.057	29.079	.380	.470	.502	76	52	78	21
29.022	29.004	29 004	29.010	.433	.470	.635	73	52	90	22
29.017	28.994	28.961	28 990	.635	.604	.563	90	94	94	23
28.939	28.902	28.913	28.918	.487	.549	.473	94	89	88	24
28.936	29.041	29.082	29.019	.487	.462	.515	94	60	84	25
29.144	29.096	29.094	29.111	.456	.462	.478	88	60	83	26
29.078	29.048	29.094	29.073	.460	.327	.416	83	42	72	27
28 998	28.926	28.932	28.952	.358	.340	.416	73	45	72	28
28.901	28.896	28.896	28.896	.505	.496	.460	94	70	83	29
28.902	28.869	28.897	28.889	.469	.469	.491	94	62	88	30
....	....	....	....	......	......	......	....	....	....	Sum
....	....	....	29.030	.458	.471	.469	52	64	46	M'n.
....	....	....	....	......	.466	......	....	54	....	Av .

OCTOBER, 1870.

Day of Month.	THERMOMETER IN THE OPEN AIR.				RAIN AND SNOW.			
	7 A. M.	2 P. M.	9 P. M.	Mean.	Time of beginning of rain or snow.	Time of ending of rain or snow.	Amount of rain or melted snow in guage, in inches.	Depth of snow, in inches.
1	58.0	70.0	61.0	63.0	....	....	....	....
2	57.0	67.0	60.0	61.3	Night.	Night.	.05	....
3	58.0	58.0	54.0	56.6	....	....	....	....
4	48.0	54.0	52.0	51.3	....	....	....	....
5	48.0	60.0	52.0	53.3	....	....	....	....
6	47.0	60.0	55.0	54.0	....	....	....	....
7	55.0	62.0	56.0	57.6	....	....	....	....
8	53.0	66.0	56.0	58.3	....	....	....	....
9	49.0	64.0	56.0	56.3	....	....	....	....
10	53.0	59.0	54.0	55.3	....	....	....	....
11	52.0	41.0	45.0	46.0	....	....	....	....
12	44.0	50.0	48.0	47.3	....	....	....	....
13	40.0	58.0	50.0	49.3	....	....	....	....
14	48.0	62.0	52.0	54.0	4½ P. M.	5 P. M.	.03	....
15	43.0	55.0	61.0	53.0	1 P. M.	Night.	1.30	....
16	47.0	50.0	47.0	48.0	2 P. M.	....	....	....
17	45.0	45.0	41.0	43.6	....	5 P. M.	.12	....
18	37.0	48.0	34.0	39.6	....	....	....	....
19	53.0	48.0	44.0	48.3	....	....	....	....
20	52.0	51.0	44.0	49.0	4 P. M.	5½ P. M.	.06	....
21	39.0	51.0	39.0	43.0	....	....	....	....
22	35.0	48.0	44.0	42.3	....	....	....	....
23	47.0	69.0	61.0	59.0	....	....	....	....
24	57.0	66.0	51.0	58.0	....	....	....	....
25	43.0	47.0	44.0	44.6	7 A. M.	8½ A.M.	.06	....
26	44.0	50.0	54.0	49.3	7½ A. M.	Night.	.07	....
27	50.0	53.0	46.0	49.6	....	....	....	....
28	39.0	50.0	45.0	44.6	....	....	....	....
29	40.0	51.0	48.0	46.3	....	....	....	....
30	46.0	46.0	40.0	44.0	Night.	2½ P. M.	.40	....
31	29.0	45.0	39.0	37.6	....	....	....	....
Sum	......	......	......	......	....	....	2.09	....
M'n.	......	......	......	50.4	....	....	....	....
Av .	......	......	......	......	....	....	....	....

OCTOBER, 1870—continued.

CLOUDS.						WINDS.						
7 A. M.		2 P. M.		9 P. M.		7 A. M.		2 P. M.		9 P. M.		
Amount of cloudiness.	Kind of clouds.	Amount of cloudiness.	Kind of clouds.	Amount of cloudiness.	Kind of clouds.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Day of month.
10	Cu ...	4	Cu ...	0	......	N. E.	1	......	0	E. ..	1	1
10	Cu ...	7	Cu ...	8	Cu ...	......	0	......	0	......	0	2
....	Haze .	10	Cu . .	8	Cu ...	W ..	4	N.W.	4	N.W.	5	3
8	Cu-st .	10	Cu-st .	10	Cu st .	N.W.	3	N.W.	3	N. ..	3	4
9	Cu st .	10	Cu-st .	1	Cu ...	N. ..	2	N. E.	1	E ..	1	5
....	Fog ..	9	Cu ...	9	Cu ...	......	0	E. ..	1	S. E.	3	6
10	Cu-st .	10	Cir-cu.	9	Cu ...	S. E.	3	S. E.	1	S. E.	1	7
6	Cu st .	10	Cir cu.	0	......	S. E.	1	......	0	S. E.	1	8
....	Fog ..	9	Cir-cu.	10	Cir...	......	0	S. E.	1	S. E.	2	9
10	Cir-cu.	10	Cir-cu.	10	Nim..	......	0	......	0	S. E.	2	10
9	Cu-st .	10	Nim..	0	......	S.W.	1	W ..	2	W ..	2	11
10	Cu st .	9	Cu-st .	10	Cu ...	W ..	2	N.W.	3	N.W.	2	12
0	......	0	......	10	Cu ...	W ..	1	S.W.	2	S.W.	2	13
3	Cu ...	7	Cir-cu.	0	......	S.W.	1	S.W.	2	W ..	1	14
....	Fog ..	10	Nim..	10	Nim..	S. ..	1	W ..	1	S. ..	3	15
10	Cir-st .	10	Cu ...	10	Nim..	S.W.	2	W ..	1	W ..	2	16
10	Cir-st	10	Nim..	0	......	N.W.	2	N.W.	2	W ..	4	17
10	Cu st	3	Cu ...	8	Cu ...	N.W.	2	W ..	2	S.W.	3	18
10	Cu st .	10	Cu ...	1	St....	S.W.	3	N.W.	3	N.W.	3	19
9	Cir-cu.	10	Cir-cu.	0	......	N.W.	1	W ..	2	S. ..	3	20
2	Cu ...	9	Cu ...	0	......	S.W.	3	N.W.	3	W ..	2	21
2	Cu ...	9	Cir ...	9	St....	W ..	2	W ..	1	S E.	3	22
0	......	0	......	0	......	S.W.	4	S. ..	4	S. ..	3	23
4	Cu-st .	10	Cu ...	10	Cu ...	S. ..	4	S W.	3	W ..	3	24
10	Nim..	10	Cu ...	10	Cu ...	N.W.	2	N.W.	2	N. ..	2	25
10	Cu-st .	10	Cu ...	10	Nim ..	N. E.	3	S. E.	3	S. E.	4	26
2	St....	0	......	0	......	S.W.	4	W ..	4	W ..	4	27
8	Cir-st.	3	Cir...	0	......	W ..	2	W ..	2	W ..	1	28
10	Cir...	10	Cir-st .	10	Cu-st .	N.W.	1	N. E	1	E. ..	2	29
10	Nim..	10	Nim..	0	......	E. ..	1	W ..	3	W ..	5	30
0	......	0	......	0	......	W ..	2	W ..	1	S. ..	4	31
....	......	....	......	....	......	......	....	......	....	......	....	Sum
6	......	8	......	5	......	......	2	......	2	......	2	M'n.
....	......	6	......	....	......	......	....	......	2	......	....	Av.

OCTOBER, 1870—continued.

Day of Month.	BAROMETER HEIGHT REDUCED TO FREEZING POINT.				FORCE OF PRESSURE OF VAPOR, IN INCHES.			RELATIVE HUMIDITY OF FRACTION OF SATURATION.		
	7 A. M.	2 P. M.	9 P. M.	Mean.	7 A. M.	2 P. M.	9 P. M.	7 A. M.	2 P. M.	9 P. M.
1	28.978	28.972	28.997	28.982	.452	.516	.449	94	70	85
2	29.038	28.947	28.912	28.965	.436	.457	.426	94	69	82
3	28.777	28.758	28.856	28.797	.394	.255	.256	82	53	61
4	28.984	29.044	29.107	29.045	.236	.206	.232	70	49	60
5	29.173	29.150	29.192	29.171	.285	.283	.334	85	54	85
6	29.188	29.151	29.180	29.173	.298	.338	.315	92	65	71
7	29.171	29.160	29.180	28.170	.321	.312	.363	74	56	81
8	29.263	29.231	29.246	29.246	.348	376	.363	86	59	81
9	29.228	29.105	29.031	29.121	.322	.343	.336	92	57	75
10	28.916	28.796	28.715	28.809	.348	.352	.362	86	70	87
11	28.619	28.600	28.637	28.618	.334	.321	228	86	86	76
12	28.632	28.647	28.756	28.678	.211	.234	.212	72	65	63
13	28.867	28.827	28.776	28 825	.203	.203	.216	82	42	61
14	28.731	28.647	28.720	28.699	.236	.399	.289	70	72	76
15	28.826	28.655	28.684	28.721	.231	.405	.505	83	94	94
16	28.912	28.992	29.072	28.990	.273	.258	.225	85	71	70
17	29.109	29.038	29.101	29.082	.204	.228	.190	68	76	74
18	29.196	29.150	29.019	29.121	.178	.212	.196	81	63	68
19	28.745	28.641	28.646	28.677	.269	.189	.218	67	56	76
20	28.608	28.452	28.474	28.511	.289	.173	.218	76	46	76
21	28.574	28.760	28.834	28.722	.173	.132	.195	73	36	84
22	29.105	29.155	29.120	29.126	.162	.165	.196	80	49	68
23	28.998	28.907	28.928	28.944	.225	.336	.297	70	47	55
24	28.984	28.964	29.038	28.995	.275	.407	.277	60	63	75
25	29.077	29.083	29.119	29.093	.231	273	.265	83	85	92
26	29.124	28.990	28.792	28.968	.265	.335	.396	92	93	96
27	28.750	28.919	29 074	28.914	.341	.375	.286	96	93	92
28	29.135	29.133	29.196	29.154	.216	.186	.275	91	71	92
29	29.173	29.128	28.828	29.043	.182	.296	.285	73	79	85
30	28.764	28.644	28.828	28.745	.286	.286	.139	92	92	56
31	28.973	28.974	28.955	28.967	.123	.182	.173	77	61	73
Sum	....	....	....	....	......	......	......	....	....	....
M'n.	....	....	....	28.953	.269	.291	.281	81	66	79
Av.	....	....	....	....	......	.280	......	....	75	....

Morning of October 13th—first frost of the season.

Night of 14th—brilliant aurora, giving to the sky a brilliant pink hue.

October 15th—severe wind from north, accompanied by ra'n, hail, thunder and lightning. The wind was sufficiently severe to unroof buildings, to burst in show windows, and in one place tore up several rods of plank walk, carrying it bodily across the street.

Morning of October 21st—first frost sufficiently severe to kill tomato and squash vines in open situations.

Morning of 31st—hard frost; in many gardens vines have remained green until this frost.

Evaporation for the month, 1.39 inches.

SUMMARY FOR THE YEAR ENDING OCTOBER 31ST, 1870.

MONTHS.	THERMOMETER IN OPEN AIR.				BAROMETER HEIGHT REDUCED TO FREEZING POINT.				RAIN & SNOW.		Evaporation in inches from an open vessel.	Amount of cloudiness.	FORCE OF PRESSURE OF VAPOR In INCHES.			RELATIVE HUMIDITY OR PER CENTAGE OF SATURATION.			PER CENTAGE OF WINDS.							
	Max.	Min.	Mean.	Variation.	Max.	Min.	Mean.	Fluctuations.	Am't rain & mlt'd snow in inches.	Am't of snow in in's.			Max.	Min.	Mean.	Max.	Min.	Mean.	S.	S. W.	N.	N. W.	N.	N. E.	E.	S. E.
November........	60.0	11.0	30.1	49	29.342	25.341	28.862	1.001	2.05	13	......	6.8	.335	.071	.141	100	51	82	7	11	16	38	10	10	1	7
December	39.5	-2.5	22.3	42	29.665	28.514	28.993	1.051	2.64	12	......	6.7	.2'2	.040	.113	100	69	89	22	13	24	25	6	9	0	1
January	40.0	-12.0	17.8	52	29.438	28.088	28.893	1.350	3.25	11	......	5.7	.248	.046	.092	100	52	86	13	27	15	30	9	1	0	5
February	38.0	-15.0	20.9	53	29.321	28.000	28.871	1.321	1.35	2	......	5 0	.191	.023	.104	100	35	88	17	23	7	40	2	2	0	9
March............	42.0	-8.0	27.0	50	29.510	28.376	28.934	1.134	3.85	17	......	7.0	.229	.031	.132	100	45	85	5	8	6	26	18	21	0	16
April....	78.0	-2.5	49.7	53	29.302	28.600	28.949	0.702	0.18	....	3.50	3.0	.550	.087	.198	100	21	54	24	8	6	15	16	15	13	3
May....	85.0	45.0	65.0	40	29.136	28.289	28.853	0.847	1.09	....	3.69	3 0	.527	.101	.313	92	22	52	25	12	15	6	7	8	7	20
June.............	98.0	53.0	71.2	45	29.149	28.563	28.911	0.586	1.92	....	5 57	2.6	.727	.191	4.51	88	21	57	7	13	12	30	8	10	11	7
July.............	91.0	58.0	73.8	33	29.150	28.638	28.888	0.512	5.25	....	6.55	3 4	.813	.225	.535	94	24	64	12	18	17	15	10	9	13	6
August..........	89.0	56.0	67.1	33	29.953	25.557	28.926	0.696	3.65	....	4.65	4.6	.909	.268	.466	97	34	65	11	37	5	9	8	3	4	3
September.......	83.0	54.0	61.2	29	29.279	28.772	29.030	0.507	4.00	....	2.80	5.3	.678	.229	.466	100	42	54	13	2	0	7	2	34	24	18
October..........	70.0	29.0	50.4	41	29.263	28.474	28.956	0 789	2.09	....	1.39	6.0	.516	.123	.280	96	36	75	11	16	29	21	4	3	3	13
Sums............	......	......	......	....	....	....	....	....	31.32	55	......	......	......	......	......	...	...	....	..	..	..	..	..	..	..	..
Means...........	67.0	24.0	46.4	....	29.309	28.434	28.922	....	.....	....	......	5	.488	.123	.275	91	39	71	13	16	13	22	10	11	6	9

ANNUAL REPORT

OF THE

BOARD OF REGENTS

OF THE

UNIVERSITY OF WISCONSIN,

For the Fiscal Year ending September 30, 1871.

BOARD OF REGENTS.

STATE SUPERINTENDENT OF PUBLIC INSTRUCTION,
Ex-Officio Regent.

Terms expire first Monday in February, 1872.

Congressional	District,	ANGUS CAMERON, - -	La Crosse.
do	do	C. S. HAMILTON, - -	Fond du Lac.
do	do	J. C. GREGORY, - - -	Madison.
do	do	N. B. VAN SLYKE, - -	Madison.

Terms expire first Monday in February, 1873.

ongressional	District,	R. B. SANDERSON, - -	Burke.
do	do	F. O. THORPE, - - -	Fond du Lac.
do	do	J. R. BRIGHAM, - - -	Milwaukee.
do	do	W. W. FIELD, - - -	Boscobel.
do	do	H. D. BARRON, - - -	Falls St.Croix.

Terms expire first Monday in February, 1874,

ongressional	District,	H. H. GRAY, - - -	Darlington
do	do	AUG. L. SMITH, - - -	Appleton.
do	do	B. R. HINCLEY, - - -	Oconomowoc.
do	do	JACOB S. BUGH, - - -	Wautoma.

OFFICERS.

C. S. HAMILTON,
President.

JOHN S. DEAN,
Secretary.

STATE TREASURER,
Ex-Officio Treasurer.

Executive Committee,
N. B. VAN SLYKE, J. C. GREGORY, R. B. SANDERSON.

Farm Committee,
R. B. SANDERSON, B. R. HINCKLEY, H. H. GRAY.

ANNUAL REPORT.

To his Excellency, the Governor of Wisconsin:

SIR:—I have the honor herewith to submit the annual report of the Board of Regents of the University of Wisconsin, for the year ending September 30, 1871:

PRESENT CONDITION AND NEEDS OF THE UNIVERSITY.

Faculty.

Since the last annual report, the Regents have secured the services of a President, in the person of Rev. J. H. TWOMBLY, D. D., of Boston, who entered upon his duties with the opening of the present collegiate year. His high character, and long experience in collegiate and educational management, with his energy and practical knowledge, lead the Board to congratulate themselves and the University upon the good fortune which enabled them to place him at the head of the University.

The Board have also the pleasure of announcing the election to the Professorship of Military Science and Engineering, of Major W. J. L. NICODEMUS, a graduate of West Point, who unites much experience in teaching the studies of his department, with entire fitness in qualifications. The vacancies which existed in the above positions at the date of the last annual report, are thus filled, enabling the Board to announce every department of the University in complete working order.

Attendance.

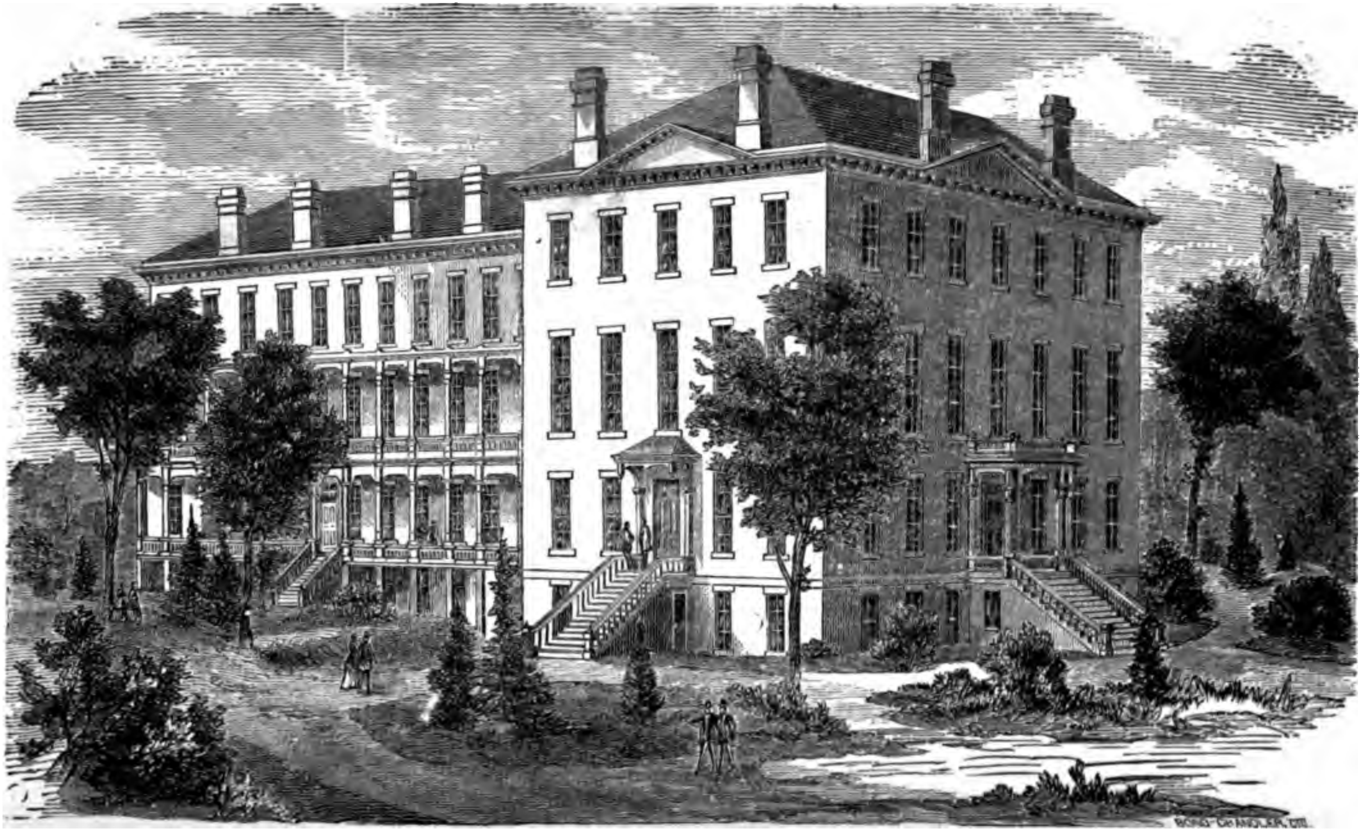
The present or first term of this collegiate year has opened with a greater number of students than ever before, and the labors of the whole corps of instructors have been fully taxed. The Regents have great satisfaction in reporting the utmost harmony in the Faculty, from highest to lowest, and a cordiality between teachers and students which has called forth a marked energy and progress in studies, and a general good conduct on the part of students. Instances of ill conduct calling for discipline are very rare, and few exceptions are found to diligent study.

The college classes are above the average of former years, both in numbers and scholarship, while an unusually large number of the preparatory students are fitting for the regular courses. Every feature of the present points to a steady growth in numbers and widening usefulness.

Buildings, Improvements and Repairs.

The Legislature of 1870 appropriated $50,000 for the erection of a Female College building—the first instance of an appropriation by the State for University buildings. With this the Regents have built a fine stone structure 50x75 feet, with a wing 40x87 feet, all three stories high and basement. It is provided with porticos, piazzas, and ample halls and recitation rooms, the conveniences of water distribution, closets, furnaces, laundry, cooking range, &c:—the basement arranged for domestic uses. It is entirely completed, everything included, plans, specifications, wells, cisterns and building—at a cost of $46,570.36, leaving in Treasurer's hands, $3,429.64 balance, which has been used in partially providing suitable furniture.

The building for military drill and gymnastic purposes has since the date of my last report, been finished, as also the Labaratory for analytical chemistry and metallurgy, the cost of which has been paid in part from funds of the current year, thus apparently increasing the sum expended for improvements. The improvement fund is charged $39,123.64, from which deduct payments for Female College, $33,957.49, leaving balance paid for other improvements, $5,166.15. The grounds have been much improved by clearing up, opening roadways, and putting out trees, and the older buildings have been generally repaired, painted, &c., at a cost of $2,259.01.



FEMALE COLLEGE BUILDING—UNIVERSITY OF WISCONSIN.

Female College.

The completion of the Female College building and its opening, marks an era in the history of the University. While other high educational institutions of the country have opened their doors to the young women who seek college education, we claim for our State, a step in advance of all others, in making such provision that the young women may avail themselves of all the privileges of the University, or may choose their studies entirely within the limits of a Female Seminary of the highest character.

The Regents take great pride in the perfection and excellence of the Female College building, and in the arrangements for the education and cultivation of the young women of the State, and they especially invite attention to this department, and the low rate of charges—the whole annual expense not exceeding one hundred and seventy dollars for the collegiate year—which is believed to be less than one-half the cost at similar institutions. At the present writing of this report, the Board of Regents have not been able in full meeting to lay down distinct rules for its governance; but in advance of such meeting, instructions have been given to the President of the University to adopt such a course in its management as will preserve its distinctive character as a Female College. As such, and under its present control, we believe it will take rank with the highest in the land.

The growing conviction in the public mind for many years back, that very many avocations might be fairly opened to women, who had thus far in the history of the race been debarred from them, has borne fruit in a liberal acquiescence to woman taking her place in the acquisition and practice of some of the scientific professions. An offshoot of this tendency of opinion, is the theory now advanced of educating the sexes together in all the departments of academic and college pursuits. This subject of co-education is one that has its advocates in every village and county of the state, has been frequently brought to the notice of the Regents, and has received from them attentive consideration. It is vehemently urged, that in their collegiate course, no distinction should be drawn between the sexes; that in study, in discipline, in recitation and lectures, the women should be required to take their places on the same footing with the men. The chief reasons alleged by the advocates of this system are, its refining influence upon the men, the great stimulus to study to both sexes; and further, that the system has been found to work admirably in the schools and academies at home.

These arguments have great force when applied to students at home, where they pass from the control and oversight of the parents, directly to that of the teacher, and thence back again to the family. It is very different when several hundred young men and women from different parts of the state, strangers to each other, meet at the University as college students, thrown togther for a course of several years of study and college life. In such a case, the continual guardianship exercised by the parent and teacher is removed, and the students left much to their own discretion and propriety of conduct; while any dereliction or failure to meet the just expectations of their friends, would be charged directly to the University. It is for these reasons, that instructions have been given to carry out a system of education for the Female College, which while it opens every department of the University to both sexes alike, yet leaves to the choice of the lady students as ambition or taste may dictate—to pursue in their own college under lady teachers—or with the regular college classes, the studies in which they desire full accomplishment.

This course I feel assured will commend itself to the friends of education, for while it complies fully with the organic law of the University, in extending equal privileges to male and female students, it is yet a conservative course, midway between the theories of those who would ride a hobby to personal popularity, and that of fogyism which yields nothing to the demands of a growing public opinion.

NEEDS OF THE UNIVERSITY.

A State institution of learning, in order to prosper, must be fostered and cared for by the State alone. It is not an object of private munificence as is the case of colleges founded by individual gifts, but must rely solely on the good will and care of guardians of the State.

The State of Michigan has given to its University an annual appropriation of $20,000, has erected all its buildings, and during the past year has erected an additional building at an expense of $75,000. The same State has given to its agricultural college (a separate institution, and located in a different part of the State), since its establishment, a no less sum in lands and money than $390,000.

In Wisconsin, a State of about equal population and wealth, with a University no way inferior (save numbers), in all the high characteristics of a great school, there has been given as follows: To the University for one college building, $50,000. To its Agricultural College, nothing. For the latter, the Regents as yet have never asked for an appropriation. Its incorporation as a part of the University, saves the State from the necessity of any separate appropriation, while the combined advantages to students are apparent to all. As the University grows with the wealth and numbers of the State, its expenses increase, and it has been only by the closest scrutiny of every expenditure that the Regents have been able to keep within the limits of the annual income.

There is urgent need of books for the library; of apparatus for the school rooms and laboratories; for enlargements of the cabinets of natural history and mineralogy, and for maps and furniture, all essential for thorough teaching, but entirely beyond the means at the disposal of the Regents.

A stringent need is for a public hall or chapel. I have heretofore called attention to this great want. It is a necessity, and calls for prompt attention. It is important in the highest degree, that the University should have one room large enough to assemble all the students under the eye and voice of the President once each day. We have no room of sufficient size to enable the largest classes to recite together—none where the usual devotional exercises can be had in the presence of the whole school. An observatory is an essential part of a great school—

but it is one which for a time we can do without, while the other needs enumerated are absolute. The regents believe these wants will be appreciated by all who take interest in the growth and development of our chief high school, and that the Legislature will give the University a chapel and such an annual appropriation as will enable the Board to meet these pressing calls.

I invite your attention to the closing paragraph of my last annual report, in reference to the importance of such legislation as will enable the Regents to reserve from sale a portion at least of what remains of the University and Agricultural College lands. These lands amount to something over 200,000 acres, and are located almost entirely in the northern portion of the state. The present and prospective development of the northern counties, by the building of a net-work of railroads, will tend greatly to enhance the value of these lands. Must these lands all be sold at the minimum price of $1.25 per acre, when a few years will so immensely increase their value? If from the original endowment grants by Congress, there had been reserved until now, ten per cent. of the lands, we should have had an endowment second to no college in the country. If we can now reserve twenty-five per cent. of the lands that remain of all the grants, for a period of twenty years or so, a future generation of students will be able to reach all of the prosperity which the most sanguine of the friends of the University have ever hoped for it. Let not our posterity have to say of us that we ignored for them all the powers this generation holds in its hands, to lay such broad and deep foundations for our University, as shall hold it up for ages to come as a beacon light, reaching and searching with its rays for every path that leads in the direction of *true* PROGRESS. I also invite your attention to the organization of the Faculty and Instructional Force, the Reports of the Dean of the Law Faculty, the Professor of Agriculture, as also those of the Secretary and Treasurer, herewith appended.

C. S. HAMILTON,
President Board of Regents.

APPENDIX.

FACULTY AND INSTRUCTORS.

J. H. TWOMBLY, D. D.,
President, and Professor of Mental and Moral Philosophy.

JOHN W. STERLING, Ph. D.,
Vice President, and Professor of Natural Philosophy and Astronomy.

JOHN B. PARKINSON, A. M.,
Professor of Mathematics.

STEPHEN H. CARPENTER, LL. D.,
Professor of Logic, Rhetoric and English Literature.

WILLIAM F. ALLEN, A. M.,
Professor of Latin and History.

ALEXANDER KERR, A. M.,
Professor of Greek Language and Literature,
and Principal of Preparatory Department.

JOHN B. FEULING, Ph. D.,
Professor of Modern Languages and Comparative Philology.

W. W. DANIELLS, M. S.,
Professor of Agriculture and Analytical Chemistry.

JOHN E. DAVIES, A. M., M. D.,
Professor of Natural History and Chemistry.

ROLAND D. IRVING, A. M., E. M.,
Professor of Geology, Mining and Metallurgy, and Curator of Cabinet.

Maj. Wm. J. L. NICODEMUS, A. M.,
Professor of Military Science and Civil Engineering

R. B. ANDERSON, A. M.,
Instructor in Languages.

HON. L. S. DIXON, LL. D.,
hief Justice of the Supreme Court of Wisconsin
Professor of Law.

HON. ORSAMUS COLE, LL. D.
Associate Justice of the Supreme Court of Wiscons
Professor of Law.

HON. WILLIAM PENN LYON·
Associate Justice of the Supreme Court of Wisc
Professor of Law.

HON. HARLOW S. ORTON, LL. D.,
Dean of Law Faculty.

J. H. CARPENTER, ESQ.,
Professor of Law.

WILLIAM F. VILAS, LL. B.,
Professor of Law.

THOMAS D. CHRISTIE,
Instructor.

STEPHEN LEAHEY, PH. B.,
Instructor.

MRS. D. E. CARSON,
Preceptress.

MISS JOSEPHINE MAGOON,
Assistant Preceptress.

MISS LIZZIE S. SPENCER, PH. B.,
Instructor.

MISS ELLA SAGE,
Music Teacher

I. COLLEGE OF ARTS.

The College of Arts is organized under the following section of the General Laws of 1866, chap. CXIV:

"SECTION 2. The College of Arts shall embrace courses of instruction in the mathematical, physical and natural sciences, with their applications to the industrial arts, such as agriculture, mechanics and engineering, mining and metallurgy, manufactures, architecture and commerce, in such branches included in the College of Letters as shall be necessary to a proper fitness of the pupils in the scientific and practical courses for their chosen pursuits, and in military tactics; and as soon as the income of the University will allow, in such order as the wants of the public shall seem to require, the said courses in the sciences and their application to the practical arts shall be expanded into distinct colleges of the University, each with its own faculty and appropriate title."

The plain object of this section is to provide, not only for a general scientific education, but also for such a range of studies in the *applications of science* as to meet the wants of those who desire to fit themselves for agricultural, mechanical, commercial, or strictly scientific pursuits. The course of study is such as to provide a sound education in the elements of science, and at the same time to give great freedom in the selection of studies according to the choice of the individual student. As higher demands are made, they will be met by adding to the list of elective studies, and by the enlargement of the Faculty of Arts, so as to form distinct colleges, as provided for in the act of reorganization.

The Departments of Agriculture, Mining and Metallurgy, and Engineering are branches of this college.

Those who wish to make Agriculture, Mining and Metallurgy, or Engineering specialities, pursue the course of study prescribed in those Departments, but all the scientific instruction in this College is given with special reference to Agriculture and other useful arts.

DEPARTMENT OF AGRICULTURE.

1st. It is the design of the University to give in this department to the graduates of colleges, and to others of proper age and acquirements, a thorough course of instruction directly pertaining to Agriculture, which will enable them to conduct the operations of a farm both intelligently and profitably.

This course is so arranged that the instruction in the class room can be completed in a single year by students already well acquainted with the physical sciences, while an opportunity will be given to those who desire it for extended laboratory practice, for a higher course in Botany, and for instruction in conducting experiments in Agriculture and Horticulture, thus making a full three years course of study.

2d. To give a wide range of optional studies in connection with the department of Philosophy, so as to secure a three years course of instruction, that will combine thorough mental discipline with theoretical and practical knowledge of the relation of science to Agriculture.

With these ends in view, the studies have been so arranged that a student may devote his entire time to Agricultural studies, or he may take one study from this course, and such studies from the Department of Philosophy as he is able to pursue.

He can graduate when he has completed a course equivalent to that in the Department of Philosophy.

Students in this, as in all other Departments of the University, can enter at any time on examination, can pursue such studies as they choose, and receive a certificate of attendance.

Special attention is called to the following characteristics of the course:

BOTANY.—Besides a thorough course in Structural, Physiological, and Systematic Botany, that will familiarize the student with the characteristics of the Natural orders, and their relations to each other, the course in Practical Botany will teach him the habits, extent, and relative importance of those species that are of practical interest.

Practical Agriculture.—In this branch of instruction it is the design to give a thorough discussion of the most approved methods of conducting the practical operations of the farm, to give the results of well tried experiments, and the principles to be deduced from them, and to show how experiments must be conducted to make them of practical value.

To aid this department, the University farm will be used, as rapidly as it can be brought into suitable condition, for the conducting of experiments in Agriculture and Horticulture.

Meteorology.—Besides the general principles of Physical Geography, and the laws of the formation and disposition of dews, frosts, etc., instruction will be given in the changes of climate produced by man, in building levees, in draining wet districts, and in the removal or planting of forests.

In Horticulture, instruction will be given in forcing plants by artificial heat, in the various methods of artificial propagation, in the economic value of small fruits and the most approved methods of producing them, and in the general principles of laying out and beautifying ornamental grounds.

Chemistry.—By reference to the course, it will be seen that as soon as the student has been made thoroughly acquainted with the elements, and the general principles of chemical affinity and combination, instruction will be given him in the laboratory, where he will, with his own hands, apply the tests required to determine the composition and properties of bodies, and thus become practically familiar with the methods used in chemical investigations. It is intended to make this course sufficiently thorough to fit him to enter upon a higher course of quantitative chemical analysis, should he desire it.

It will be seen that Organic Chemistry is taught with particular reference to its economic applications.

In Agricultural Chemistry proper, the course is sufficiently extended to give the student a thorough knowledge of the relations of Chemistry to Agriculture, and its applications to the various operations of the farm.

ZOOLOGY.—The entire course of this science is given with particular reference to the demands of the farmer. And in addition to the principles of classification and history of domestic animals, it is believed that the course in Entomology will prove of great value—teaching, as it does, the habits of injurious species, and the means of destroying them or of preventing their depredations.

FORESTRY.—The instruction in Forestry will include the best methods of cultivating forest trees, and the relative value of different varieties of trees for timber, for fuel, or for screens to modify the effect of severe winter winds.

INDUSTRIAL STATISTICS.—Under this head it is proposed to give an account of the industrial productions of the country, and their relative commercial value.

HISTORY OF AGRICULTURAL EDUCATION will consist of a brief account of the efforts that have been made in this and other countries, to advance the interests of agriculture, by the direct application of science.

In addition to the studies on agriculture, courses of lectures will yearly be given by the President, the resident Scientific Professors, and by Professors and Lecturers from abroad, who have made a special study of the various subjects relating to agriculture. By the employment of non-resident lecturers, the University will have the benefit of the scientific knowledge and practical skill of gentlemen in this and other States whose services as permanent professors could not be secured.

In the present state of agricultural education, any course of study may be regarded as an experiment. An institution, or any department of instruction in it, must be modified until it meets the wants of the people. Their wants will be learned by the demands the students make for instruction, when different courses of study are presented for their acceptance.

The foregoing course of study is believed to be one that will, in the main, meet the requirements of the agriculturists of the State, embracing as it does, either as a distinct agricultural course, or in connection with the department of Philosophy, a full educational course, such as those Agricultural Colleges that have been most successful have adopted after years of experience.

The land given by congress has been located, and when sold will afford abundant means for carrying on this department in the most liberal manner. In the mean time every effort will be made with the means now at the command of the University, to meet the wants of all students who present themselves, as well as the reasonable demands of the people.

DEPARTMENT OF MILITARY SCIENCE.

Physical culture, so long neglected in the schools of this country, is now everywhere claiming the attention of educators. Cultivated intellect, in the absence of muscular energy, is inadequate to promote the welfare of society, or the happiness of its possessor. Aware of this fact, the Regents have adopted means to secure the physical training of the students. The Military Department is thoroughly organized and placed under the direction of Major W. J. L. Nicodemus, late of the United States Army. By action of the Board of Regents, military drill is required of all the members of the Sophomore and Freshman Classes, who must provide themselves with the prescribed uniform, on consultation with Major Nicodemus. This uniform is cheap, neat, and suitable for ordinary wear. It is expected that many students not connected with these classes, will join the battalion. This is earnestly recommended as furnishing a most healthful exercise. Students will be required to drill only three hours a week. Those who join the battalion will be subject to all the rules of the Department, and cannot withdraw without special action of the faculty.

A commodious building has been erected for a *Drill Room and Gymnasium.*

Rules and Regulations for the Government of the Department of Military Science in the University of Wisconsin.

ARTICLE I.

Organization.

1. All students of the Sophomore and Freshman and those the other classes who may so elect, shall be organized into a Battalion of two or more companies under the command of the Professor of Military Science.

2. Each company shall be designated by a letter of the alphabet and officered by one Captain, two Lieutenants, five Sergeants and eight Corporals.

3. The number of officers and non-commissioned officers as provided for in the preceding paragraph will be appointed by the President of the University in consultation with the Professor of Military Science.

ARTICLE II.

Uniform.

1. There shall be adopted a uniform dress, to consist of a sack coat, pantaloons and forage cap.

2. The sack coat shall be single breasted, of dark blue cloth one row of four buttons on the breast; turn-over collar; three small buttons on each cuff; pockets on the inside; top button on breast to be well up to the throat.

3. *Pantaloons.*—The pantaloons to be made of the same material and color as the coat, and made up plain with no trimmings.

4. *Cap.*—The forage cap to be of the same material and color as the coat, of the army pattern with a gold wreath enclosing the letters U. W. The wreath to be worked on black velvet and the letters to be embroidered in silver.

5. *Button.*—The button of the coat and cap to be of the same pattern as that of the general staff corps of the U. S. Army, with the addition of the letters, U. W., stamped upon it over the eagle.

6. *Equipments.*—The equipments and ensignia of rank shall be like those worn by officers and non-commissioned officers of the same rank in the U. S. Infantry.

ARTICLE III.

Military Exercises.

Practical instruction in the School of the Soldier, Company and Battalion; Skirmish Drill and Target Practice.

ARTICLE IV.

Military Science.

The following are the text books in use in this department, viz:

Smith's Topography.
Mahan's Military Engineering.
Mahan's Advanced Guards, Out Posts, etc.
Benet's Military Law and Practice of Courts Martial.
Benton's Ordnance and Gunnery.
Upton's Infantry Tactics.
United States Tactics for Field and Garrison, Artillery and Cavalry.
United States Manual of Signals.
United States Army Regulations.

ARTICLE V.

The Board of Regents at its Annual Sessions will forward to the Governor of the State, the names of five students who have gone through the above course, standing first on the list according to merit in their studies and military deportment, who shall be recommended to the War Department as proper persons to receive the appointment of Second Lieutenants in the Regular Army.

DEPARTMENT OF ENGINEERING.

This department is in charge of Prof. W. J. L. Nicodemus, a graduate of the United States Military Academy.

The object of this department is to give its students such instruction in the practice of Civil Engineering as to fit them, after a moderate amount of practice, in the field, to fill the higher positions in the profession.

This department has lately been reorganized by Prof. Nicodemus. The course of Instruction is full and practical. Means have been taken for securing the best European instruments and Models for teaching Engineering.

Students are permitted to take any part of the course for which they are fitted.

The requirements for commencing the Engineering Course are the same as those for entering the Junior class of the College of Arts.

DEPARTMENT OF MINING AND METALLURGY.

This department was established by the Board of Regents at their last annual meeting. The object of this department is to furnish instruction in those branches of science, a thorough understanding of which is essential to the intelligent worker either in mining or metallurgy.

ADMISSION.—Students who have completed the Freshman and Sophomore years of the College of Arts, may enter at once upon the studies of this department. Persons wishing to pursue this course who have not previously been students of the University, and who are candidates for a degree, must pass examination on the studies of the Freshman and Sophomore years.

THE COURSE OF STUDY will be arranged in detail at the beginning of the collegiate year. The course will occupy two years, and will be so arranged that all studies which should precede the course required in this department will be given in the Freshman and Sophomore years of the College of Arts.

Laboratories completely equipped have been prepared for practical instruction in Analytical Chemistry, Assaying, Determinative Mineralogy, etc. Collections of Minerals, Ores, Rocks, Fossils, etc., are available to the student, and will be added to from time to time. The above information merely gives an outline of the work to be done by the new department. In some particulars, and especially in the large Assay Laboratory, just fitted up, the University has advantages not possessed by any other Western institution.

DEPARTMENT OF LAW.

The Law Department of the State University was organized and put in practical operation in the year 1868, and its success has been gratifying in the highest degree. The great advantage of professional schools for the rapid and thorough elementary training of professional men has been long since completely demonstrated, and no profession has more entirely accepted and heartily acknowledged the benefits of such schools than the legal profession.

The learning of this profession embraces almost all the relations of life, and as it is the result of the experience of many ages, is scattered through very numerous volumes of treatises, reports, statutes and digests. To obtain the mastery of the numerous topics embraced within the limits of the body of the law in such degree of perfection as marks the learned lawyer, requires many years of diligent study and practical experience.

This result is not to be attained by any mere student. What the beginner wants is to gain a comprehensive general view and analysis of the whole system, then to learn, without the careful reading which would occupy a lifetime, what the books contain, and where to search for more particular and detailed information; and to acquire the habits and modes of legal study and thought.

Superadd to this an acquaintance with the rules and principles of practice in the Courts, and the Student is prepared to begin the work of life.

This degree of attainment can be reached in the professional school in at least half the time that the student can otherwise acquire it, and with the additional advantage that there is no incumbrance of obsolete ideas or mistaken impressions, which are so difficult for any but a lawyer to distinguish from living doctrine among the great mass of legal writings.

To afford to the young men of Wisconsin and the Northwest ready facilities for such acquirements, this Department has been established by the State University.

The Method of Instruction is for the most part by lectures, and by reading under the direction of the professors, with moot court practice. The lecture system is peculiarly adapted to the study of law. Few text books are written for students. The most elementary works are designed as exhaustive treatises for the use of lawyers, and embrace not only the history of the growth of the doctrines, but also a discussion of the subject in far more detail than the student can advisably pursue so early. The lectures give a clear analysis of the subject under discussion, not involved with that which is obsolete or too minute.

The practising lawyer, acting as instructor, can refer the student to just such parts of the text books and to such adjudications in the reports, as present in the best manner the principles which it is important to know. This system of reading cases in connection with text books is of the first usefulness.

The Moot Court will be held weekly; and here the students are taught to perform, as students, just what they will be required to do as lawyers. The preparation of pleadings and the argument of questions—all selected from actual cases occurring in practice and designed to illustrate the subjects discussed in the lectures—under the direction of the Dean of the Faculty, formerly one of the Circuit Judges of the State, will afford to the student unsurpassed facilities for acquiring a practical familiarity with the modes of administering the law. To those who know the difficulty with which the young lawyer acquires the easy confidence necessary to successful practice, this part of the school will especially commend itself.

An additional means to the same end consists in the forming of Clubs by the Students themselves, for which the Instructors will afford every assistance, and the use of the lecture room is granted.

A certificate of graduation from this Department will entitle the student to admission to practice in all the courts of the State.

The peculiar advantages which the City of Madison, as the capital of the State, affords to the student of law deserve mention.

All sessions of the Supreme Court are held here, and also one term of the U. S. Circuit and District Courts annually. The

Circuit Court for the County of Dane holds three terms annually; so that there is almost constantly some court in session.

The Law Library of the State, which is probably the largest collection of the kind in the Northwest, is at all times accessible to the Students. The advantage of this library to the Student can hardly be overestimated. He can here become familiarized with series of reports and with many treatises which are rarely found in private libraries.

The Miscellaneous Library of the State Historical Society, numbering over 30,000 volumes, is also open to the Students of this school.

Admission.—Students will be admitted at any time; but those who are not Collegiate graduates must be 20 years of age to enter this Department.

No examination for admission is required.

Credentials of good moral character must be furnished.

II. COLLEGE OF LETTERS.

The course pursued in this College is the usual classical course, consisting of a complete course in Classics, Mathematics, Science and Literature, and is intended to be fully equal to that pursued in the best Colleges in the country. While great care is taken by the authorities of the University to furnish young men with the means of obtaining a thorough preparation for the various departments of business, those studies which enable the student to secure the treasures of ancient wisdom and bring him into sympathy with the great thinkers of past ages will receive a requisite share of the time of instructors and students.

PREPARATORY DEPARTMENT.

The object of this Department is to fit young men for entering either the College of Arts or the College of Letters. It is not designed to do the work of Common Schools. Each member of the Faculty has a general direction of the studies pertaining to his department, and renders such assistance as may be required. Those who enter this Department are subject to the same rules, and allowed the same privileges as College Students. Many apply who are not fitted to enter. To prevent disappointment, application should be made by letter, stating the age and acquirements of the applicant.

Candidates must not be under twelve years of age, and will be examined in Reading, Spelling, Penmanship, Arithmetic through Interest, English Grammar, and Descriptive Geography.

The Preparatory Course for the College of Arts, is as follows:

First Term.	Physical Geography. History of the United States—Scott. Elementary Algebra—Robinson.
Second Term.	Arithmetic—Robinson. Modern History—Labberton's Outlines. Elementary Algebra—finished.

Third Term. Sentential Analysis—Greene.
History of England—Smith.
Plane Geometry—Loomis.

The Preparatory Course for the College of Letters, consists of the studies given above, and also of the following:

Allen's Latin Grammar, Lessons, Reader (to p. 174) and Composition;
Four Orations of Cicero;
Leighton's Greek Lessons;
Goodwin's Greek Grammar and Reader:
History of Greece and Rome, (Smith);
Classical Geography and Antiquities.

NOTE.—The following three years' course is recommended to students who prepare for the College ot Letters:

First Year. Latin begun; Physical Geography; Arithmetic; Sentential Analysis; History of United States, Modern *Europe and *England.
Second Year. Latin, continued; Greek, begun; Ancient History, Geography, etc.
Third Year. Latin and Greek, continued: Elementary Algebra; Plane Geometry.

POST GRADUATE COURSE.

Bachelors of Art, Science and Philosopby, will be admitted to the University as candidates for the degree of Doctor of Philosophy. They must devote two years to study under the direction of the President and Faculty, and pass a satisfactory examination before the Board of Examiners appointed by the Regents.

The studies are optional but they must be selected from at least two sections, and the studies in some one section must be continued during the whole course.

Students who have pursued this course for one year, on satisfactory examination, are entitled to the Master's Degree.

The object of this course is to secure a higher degree of scholarship in Literature and Science than it seems possible to attain in the present state of our colleges, under the ordinary class system.

Those who enter upon it will receive all needed counsel and instruction; but they will be encouraged to pursue their studies as specialties, not limited as to time or interfered with by other studies as in the College course.

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* Anderson's General History anl History of England are recommended as substitutes for those above.

III. FEMALE COLLEGE.

The course of study in this College is similar to that in the College of Arts, and is designed to be fully equivalent to it.

In addition to the prescribed course, young ladies will be instructed in any study taught in the College of Letters or Arts, for which they are prepared. They may also attend all University lectures.

Ladies and gentlemen will unite in class exercises when, in the judgment of the Faculty, such an arrangement shall be desirable.

Students who do not desire to graduate may enter at any time, and pursue any study of the term for which they may be prepared.

The Female College building now in process of erection will be completed early in October; until that time the South College building will be occupied by the members of this College, and will be under the immediate charge of the Preceptress, who, with her associate teachers, will reside in the building.

This edifice has rooms for the accommodation of about eighty ladies. Besides these private rooms, there are others for the use of pupils in Music, Painting and Drawing; also a commodious and well furnished Hall for the use of the Castalian Society, organized by the ladies of the College.

The new building will be spacious and elegant, and will furnish accommodations for at least eighty students. It will also contain rooms for the accommodation of the female teachers, and for general exercises and instruction in music. This edifice, by furnishing the means of relief to apartments now overcrowded, will greatly increase the educational facilities of the University. The annual rental of furnished rooms in the new building has not yet been fixed by the Regents.

Mrs. D. F. Carson, favorably known as Preceptress in the High School at Beloit, has been elected Preceptress in this College.

The Department of Boarding, both in the South College building and in the new building will be under the direction of a judicious matron. Board will be furnished at $3 per week, and no students will be allowed to board themselves in either of these buildings after the next term. Students who wish to board themselves can readily find rooms for their purpose, convenient to the University.

It is designed to give much greater attention to the Fine Arts than they have heretofore received. A thoroughly trained and skillful teacher of music will be employed, and pianos will be furnished at reasonable rates to students desiring to practice. Instruction will also be given in Drawing and Painting. A knowledge of these arts is essential to a complete education, and every necessary effort will be made to furnish the young ladies of this State the means of acquiring a finished culture.

COURSE OF INSTRUCTION

FRESHMAN YEAR.

First Term.

Mathematics, - - - Higher Algebra begun. Loomis.

College of Letters.	**College of Arts.**
Latin—Cicero's Philippic and Verrine Orations.	English—Mulligan's Structure of the English Language.
Greek—Greek Historians.	French—Otto's French Grammar.

Optional, - - - - - - - - Scandinavian.

Second Term.

Mathematics, Algebra completed, Solid Geometry begun. Loomis.

Latin—Livy.	English—Mulligan completed. Craik's English of Shakspeare.
Greek—Xenophon's Memorabilia.	French—Otto's Grammar.
	Natural Philosophy—Norton.

Third Term.

Mathematics, Geometry completed. Plane Trigonometry. Loomis.

Botany, - Gray's Manual and Lessons.

Greek—Homer's Iliad.	French—Otto's French Reader.
	Natural Philosophy—Norton.

Themes and Declamations throughout the year; also Latin and Greek Composition in College of Letters.

SOPHOMORE YEAR.

First Term.

Matematics, Conic Sections and Analytical Geometry. Loomis.

German, - Comfort's Course.

Latin—Horace.	Science—Agriculture, Lectures. Meteorology. Loomis.

Lectures, - - - - - - History of Roman Empire.

Second Term.

Science, - - - Anatomy and Physiology. Hitchcock.
Zoology begun, Agassiz.

Latin—Germania and Agricola of Tacitus.	Mathematics—Calculus. Loomis.
	German—Comfort's Course.
Greek—Prometheus of Æschylus.	French—Otto's Reader.

Lectures, - - - - - - - Mediæval History.

College of Letters.	**College of Arts.**

Third Term.

MATHEMATICS, - - Spherical Trigonometry. Loomis.

LATIN—The Latin Poets.	MATHEMATICS—Surveying, etc. Loomis.
GREEK—Demosthenes de Corona.	SCIENCE—Zoology completed.
REVIEW—Latin and Greek Grammar.	GERMAN—Comfort's Course.
LECTURES—Greek and Roman Literature.	FRENCH—Fleury's Histoire de France.

LECTURES, - - - - - - - - - Modern History.

Themes and Declamations throughout the year; also Latin and Greek Composition in the College of Letters.

JUNIOR YEAR.

First Term.

CHEMISTRY, - - - - - - - - - - - Fownes or Barker.
MECHANICS, - - - - - - - - - - - Snell and Lectures.
RHETORIC, - - - - - - - - - - - Bain and Lectures.

GREEK—	GERMAN—Whitney's Reader.

OPTIONAL, - - - - French, Historical Geography.

Second Term.

PHYSICS, - - - - - - - Snell and Lectures.
HISTORY, - - - - - - - - Hallam's Middle Ages.

LATIN—The Rudens of Plautus. Harrington.	CHEMISTRY—
GREEK—The Clouds of Aristophanes. Felton.	GERMAN—Whitney's Reader.

OPTIONAL, - - - - - - - - - - - French.

Third Term.

ASTRONOMY, - - - - - - - - - - White.
CONSTITUTIONAL AND INTERNATIONAL LAW—

LATIN—Juvenal.	ANALYTICAL CHEMISTRY.
GREEK—Plato's Gorgias.	GERMAN—Whitney's Reader.

OPTIONAL, - - - - French, History of Government.

SENIOR YEAR.

First Term.

MENTAL PHILOSOPHY, - - - Haven.
ENGLISH LITERATURE, - - Shaw and Lectures.
ÆSTHETICS— - - - - - Bascom.

SCIENCE OF LANGUAGE. Whitney	DETERMINATIVE MINERALOGY.

LECTURES, - - - - - - Comparative Philology.
Mineralogy.
OPTIONAL, - - - - - Metallurgy, Assaying.
Latin. German.

College of Letters. **College of Arts.**

Second Term.

MORAL PHILOSOPHY - - -	Hopkins.
LOGIC, - - - - - - - -	Jevons.
GEOLOGY, - - - - - -	Dana and Lectures.
OPTIONAL, - - - - - -	Metallurgy, Assaying. Latin. Greek.

Third Term.

NATURAL THEOLOGY, - - -	Chadbourne.
PHILOSOPHY OF RHETORIC, - -	Bascom.
POLITICAL ECONOMY, - - -	Perry and Lectures.
LECTURES, - - - - - -	Evidences of Christianity. History of Civilization.
OPTIONAL - - - - - -	Economic Geology. Latin. Greek, German.

FEMALE COLLEGE.

The course of studies for the Female College is the same as that of the College of Arts, with the following substitutes allowed:

Sophomore.

First Term.	Elementary Rhetoric, (Hart) in place of Agriculture and Meteorology.
Second Term.	Elementary English Literature, (Gilman) in place of Calculus.

Junior.

Third Term.	German Literature in place of Analytical Chemistry.

Senior.

First Term.	Studies in Early English, (Chaucer) in place of Determinative Mineralogy; or some Elective Study, approved by the Faculty.

Schedule of Recitations for 1871-2.

FIRST TERM.

Class.	*9-10.*	*10-11.*	*11-12.*	*12-1.*
SENIOR.....	Astronomy.	Eng. Lit. and Æsthetics.	Mental Philosophy.	
JUNIOR.....	Rhetoric, M., Tu , W., Th.	Mechanics.	Chemistry.	German, Tu., F.
SOPHOMORE.	* Agriculture and Meteorology.	Higher Algebra finished.	German.	Homer, M., W. Horace, Tu., Th. History, F.
FRESHMAN .	Higher Algebra begun.	Greek. * Mulligan, M., T.. Th., F.	Latin. *Hist. of U.S., T., W., Th., F.	* French, M., W.
SECOND TERM.				
SENIOR.....	Geology.	Logic.	Moral Philosophy.	
JUNIOR.....	History, M., W., F. Latin, Tu., Th.	Physics, M., Tu., Th., F.	* Chemistry, T., W., Th., F. Greek, M.	Anatomy, Physiology and Zoology, M., T., W., Th. * German, F.
SOPHOMORE.	Prometheus, M., W. Quintilian, Tu., Th.	Trigonometry.	* German.	Anatomy, Physiology and Zoology, M., T , W., Th. History, F.
FRESHMAN .	Higher Algebra and Solid Geometry.	Greek. * Craik's Eng. of Shakspeare, M., Tu., Th., F.	Latin.	*Natural Philosophy, Tu., W., Th., F. * French, 2 P. M., M.. W.

* College of Arts, instead of Latin and Greek.

Schedule of Recitations for 1871-2—continued.

THIRD TERM.

Class.	*9-10.*	*10-11.*	*11-12.*	*12-1.*
SENIOR.....	Science of Language, M., Tu., Th., F.	Philosophy of Rhetoric, M., Tu., W., Th.	Natural Theology, Tu., W., Th., F.	History, M., W., F.
JUNIOR.....	Constitutional and Intertional Law.	Astronomy.	† Latin, M., Tu., W., Th.	*Zoology, M., Tu., W., Th. German, F. †Greek, M., Tu., W., Th.
SOPHOMORE	Botany, M., W., F.	Analytical Geometry, Tu., W., Th., F.	*German, M., Tu., Th., F. Latin, M., Tu., W., Th.	*Zoology, M., Tu., W., Th. Greek, M., Tu., W., Th.
FRESHMAN..	Botany, M., W., F. *English, Tu., Th.	Greek. *Physical Geography, M., Tu., Th., F.	Solid Geomotry and Plane Trigonometry.	Latin, Tu., Th. *French, M., W.

* College of Arts, instead of Latin and Greek.

† Elective—the student required to make a choice.

TECHNICAL COURSES.

DEPARTMENT OF AGRICULTURE.

FIRST YEAR.

First Term.

BOTANY.—Structural Botany, including microscopic examination of tissues and other minute structures. Physiological Botany, including the germination and growth of plants. Systematic Botany, or classification of plants, including a discussion of the general principles of classification in the different departments of Natural History, the limitations of species and origin of varieties, with exercises in Botanical analysis.

Second Term.

PRACTICAL AGRICULTURE.—Location of farm. Division into fields. Arrangement and planning of farm buildings. Farm implements. General principles of tillage. Principles of Drainage. Laying out and construction of drains. Methods of seeding. Harvesting of crops.

METEOROLOGY.—Dews, Frosts, Fogs, Clouds, Rain, Hail, Snow, Winds and local causes affecting climate, as proximity to mountain chains, to forests, or to bodies of water. Effect produced by the removal of forests, or by planting screens of timber. Meteorological instruments, their methods of use and advantages to the agriculturist.

Third Term.

PRACTICAL BOTANY.—Botanical characteristics and geographical distribution of the natural orders, with their relative importance. The genera and species having agricultural value; those having commercial or medical value; those having ornamental value, and those which are noxious or detrimental—as weeds or poisonous plants.

HORTICULTURE.—Hot beds, their construction and use. Methods of propagation of plants, by layers, by cuttings, by budding or grafting, etc. Transplanting. Varieties of small fruits and the best means of cultivating them. General management of nurseries. Landscape gardening.

SECOND YEAR.

First Term.

CHEMISTRY.—The forces, Heat, Light, Electricity and Magnetism. Chemical affinity and the laws of chemical combination. The Elements, their history, properties, combinations and uses. Applications of Chemistry to the arts and manufactures. Laboratory practice will be begun as soon as the student has become sufficiently advanced, taking up the special reactions of the elements, and the laws of chemical decomposition and precipitation.

Second Term.

Zoology.—Principles of classification. Descriptive Zoology, comprising the systematic arrangement of animals in accordance with their natural affinities, into classes, orders, families, etc. Natural history of domestic animals.

Organic Chemistry.—Composition of organic bodies and their special characteristics. Chemistry of germination, of nutrition, of vegetable growth, of decomposition, of fermentation, of saponification.

Analytical Chemistry.—Including general analysis, analysis of Minerals, Blowpipe analysis, analysis of soils, manures and ashes of plants. Volumetric analysis and its applications to acidimetry and alkalimetry.

Third Term.

Practical Agriculture.—General principles of Farm Economy. Care and feeding of Stock. Manures, animal, vegetable and mineral, their management and mode of application. Preparation of the soil for particular crops. Cultivation of crops. Management of grass lands. Improvement of soils by physical means, as draining, subsoiling, etc. Conducting experiments. Industrial Statistics.

Zoology.—General Physiology, Comparative Anatomy, and Embryology. Entomology, including classification of insects. Habits of noxious species and best means of checking their ravages. Habits of beneficial species.

THIRD YEAR.

First Term.

Forestry.—Planting and management of Forest Trees. Soils adapted to their growth. Value of different kinds of trees for fuel, building and other purposes.

Geology—Dynamical and descriptive. Origin of soils. Building materials. Coal and metals.

Second Term.

Agricultural Chemistry.—Composition of soils. The relations of air and moisture to vegetable growth. Connection of light, heat and electricity with growth of plants. Chemical changes attending vegetable growth. Chemistry of the various processes of the farm, as plowing, fallowing, draining, etc. Preparation, preservation and composition of manures. Artificial manures. Methods of improving soils by chemical means, by mineral manures, by animal manures. Chemical composition of the various crops. Chemistry of the dairy.

Third Term.

Animal Husbandry.—Breeds of domestic animals, their characteristics, and adaptation to particular purposes. Principles of stock breeding. Veterinary surgery and medicine.

History of Agricultural Education.

Note.—It will be noticed that the same branch sometimes occurs in different parts of the course. In some cases this has been found necessary in properly arranging the studies into terms. In other cases this necessity arises from the different methods in which the same subject will be discussed; these methods belonging to different departments of instruction, some of them adapted to students in the earlier. and others to those in the later part of the course.

DEPARTMENT OF ENGINEERING.

JUNIOR YEAR.

First Term.

Roads and Railroads -	Gillespie and Lectures.
Descriptive Geometry -	Church.
Chemistry - - -	Lectures.
Topographical Drawing -	Elementary Topography.
Geometrical Drawing -	Orthographic, Spherical, Isometric projections.
Elective - - - -	Rhetoric, German.

Second Term.

Building Materials - -	Mahan and Lectures.
Theoretic Mechanics -	Rankine.
Analytical Chemistry -	Qualitative.
Topographical Drawing -	Maps of Farm, Topographical and Hydrographical Surveys.
Geometrical Drawing -	Shades, Shadows, Perspective, Colors.
Elective - - -	History, German.

Third Term.

Structures - - -	Mahan and Lectures.
Practical Mechanics -	Rankine.
Analytical Chemistry -	Quantitative.
Astronomy - - -	White and Lectures.
Topographical Drawing -	Plans, Profiles, Sections of Roads, Railroads, Canals.
Geometrical Drawing -	Stereotomy, Structures.
Elective - - - -	Qualitative Analysis, Constitutional Law, German.

SENIOR YEAR.

First Term.

Prime Movers, - -	Rankine and Lectures.
Geodesy, - - -	Rankine.
Mineralogy, - - -	Determinative.
Metallurgy, - -	Lectures.
Æsthetics - - -	
Geometrical Drawing,	Steam Engine, other Prime Movers, Machines, Projects.
Elective, - - -	Quantitative Analysis, English Literature, Science of Language.

Second Term.

BRIDGES,	Haupt and Lectures
COMBINED STRUCTURES,	Rankine.
ASSAYING,	Lectures and Practical Exercises
GEOLOGY,	Lectures,
GEOMETRICAL DRAWING,	Bridges, Machines, Projects.
ELECTIVE,	Moral Philosophy, Logic.

Third Term.

WATER ENGINEERING,	Bresse and Lectures.
RAILROAD ENGINEERING,	Scribner and Lectures.
ECONOMICAL GEOLOGY,	Lectures.
GEOMETRICAL DRAWING,	Hydraulic Motors and Works.
GENERAL REVIEW.	

Practical exercises, such as field practice, with the use of instruments, laying out railroad curves, preparing projects, with drawings and specifications of machines and structures, etc., continue through the entire course. Theses are required for graduation.

DEPARTMENT OF MINING AND METALLURGY.

The Course of Study in this Department, will be fully arranged at the beginning of the coming Collegiate Year. Instruction will be given in the following subjects:

Descriptive Geometry,
Shades, Shadows and Perspective.
Mechanics.
Civil Engineering.
Mining Engineering.
Drawing.
Chemistry.
Qualitative Analysis.
Quantitative Analysis.
Blowpipe Analysis.
Determinative Mineralogy.
Assay of Ores.
Metallurgy.
Geology.
Economic Geology.

LAW DEPARTMENT.

First Term.

JUDGE ORTON,	Personal Property, Partnership, Corporations, Contracts of Sale.
PROF. CARPENTER,	Criminal Law.
JUDGE COLE,	Domestic Relations.
PROF. VILAS,	The Constitution and Jurisdiction of Courts. Common Law Pleadings.

Second Term.

JUDGE ORTON,	The Law Merchant, covering negotiable paper, suretyship and guaranty. Insurance. Fixtures.
PROF. CARPENTER,	Contracts.
JUDGE LYON	Practice.
PROF. VILAS,	Equity Pleading. Pleading under the Code.

Third Term.

JUDGE ORTON, - - -	The Law of Real Estate, Uses, Trusts, Powers, and Wills.
PROF. CARPENTER, -	Bailment and Agency.
JUDGE DIXON, - - -	Equity Jurisprudence.
PROF. VILAS, - -	Law of Evidence.

POST GRADUATE COURSE.

SECTION I. NATURAL HISTORY—
- Botany.
- Mineralogy.
- Geology.
- Mining.

II. CHEMISTRY—
- Chemical Philosophy and Physics.
- Qualitative and Quantitative Analysis.
- Applied Chemistry.

III. MATHEMATICS—
- Pure Mathematics.
- Mechanics and Physics.
- Astronomy.
- Engineering.

IV. PHILOSOPHY AND HISTORY—
- History and International Law.
- Psychology and History of Philosophy.
- History and Criticism of English Literature.

V. PHILOLOGY—
- Latin and Greek Languages and Literatures.
- Comparative Philology.
- Modern European Languages.

GENERAL INFORMATION.

POLICY.

It is the aim of the University to meet the educational wants of every student in the State. The courses of study as laid down are intended to be the mere outlines of work. In the optional studies and post graduate course there is provision for all the demands of higher scholarship which are now made upon the Institution. And it is confidently expected that by the sale of lands and in other ways, provision will be made for the constant growth of the University as greater demands are made upon it.

It is advisable that students should pursue the prescribed courses if possible, adding to them as they are able, from the optional studies; but, by special vote of the Regents, the Faculty may excuse a student from any study in either course and substitute for it any other of equal educational value, such action of the Faculty being a matter of record.

The whole policy of the Institution is determined by the Regents who as a body represent the people, and no particular sect or party.

GOVERNMENT.

Students are held responsible only for good order and the diligent use of their time. Those who fail to conform to this simple requirement are at once dismissed. The University is no place for idlers, for disorderly persons or for those who do not propose to give their *whole time* to the work prescribed for them by the Faculty. The loss of a single recitation not only injures the student, but those connected with him.

Leave of absence will not be granted except in cases of absolute necessity.

Each Faculty has special care of its own College or Department, but all the instructors teach wherever their services are required. Weekly reports are made by each Professor to the Faculty, of the work in his own department and of all cases of delinquency.

The students and Faculty are assembled for prayers daily, fifteen minutes before the morning hour for commencing recitations. At this time all public announcements are made, and the President also gives directions and instruction to the students in regard to all their general duties as members of the University.

No student is required to attend any religious exercises of any kind, but all directions in regard to this matter, given by parents or guardians, will be cheerfully followed.

LECTURES.

In addition to the lectures given in connection with the recitations, some subjects are taught entirely by lectures, the students being required to take notes, and to recite upon the lectures the same as when a text-book is used.

The following are the regular courses of lectures:

To the SENIOR CLASS, on Mental and Moral Philosophy, by the President; on Geology and Mining, by Prof. Irving; on English Literature, Logic and Evidences, by Prof. Carpenter; on Astronomy, by Prof. Sterling; on Comparative Philology, by Prof. Feuling; on History of Civilization, by Prof. Allen.

To the JUNIOR CLASS, on Chemistry, Physiology and Comparative Zoology, by Prof. Davies; on History, by Prof. Allen; on Civil Polity and International Law, by Prof. Parkinson; on Mechanics and Physics, by Prof. Sterling, and on Rhetoric and English Composition, by Prof. Carpenter.

To the SOPHOMORE CLASS, on Structural and Sysematic Botany, by Prof. Davies; on Practical Botany and Agriculture, by Prof. Daniells, and on History by Prof. Allen.

To the FRESHMAN CLASS, on the Laws of Health and Methods of Study, by the President; on History, by Prof. Allen; and on Natural History in its relations to the Arts, by Prof. Davies.

To Special Students, on Analytical Chemistry, by Prof. Daniells.

In addition to these courses, other Lectures are delivered on Special subjects, by members of the Faculty and other scientific gentlemen.

LIBRARY.

The University Library comprises nearly four thousand volumes.

All the students have access to it free of charge. Valuable additions have been made during the past year.

Students also have opportunity, free of expense, to consult the State Historical and State Libraries, the former numbering thirty five thousand volumes, and the latter comprising a choice collection of miscellaneous works and a very complete Law Library. Each is furnished with commodious rooms kept comfortable at all hours of the day. These are Library privileges unsurpassed in the West, and equalled in very few institutions in the country.

EXAMINATIONS.

At the close of the first and second terms there is a public examination of all the classes of the University in the studies of the term.

During the week preceding the Commencement, the several classes are examined, in presence of a Board of Visitors, in the studies of the year.

Promotion from class to class is made to depend on these examinations.

DEGREES.

Students who complete the course of study prescribed in the College of Letters are entitled to the degree of Bachelor of Arts, and, after the expiration of three years from the time of graduation, upon application to the Faculty, accompanied with evidence of satisfactory proficiency, are recommended to the Regents to receive the degree of Master of Arts.

Students who complete the course of study in the College of Arts, are entitled to the degree of Bachelor of Philosophy, and, after the expiration of three years from the time of graduation, on recommendation of the Faculty to the Regents, as in the case of Master of Arts, receive the degree of Master of Science.

Students who complete the prescribed course of study in the Law Department, upon examination and recommendation of the Law Faculty, are entitled to the degree of Bachelor of Laws.

Students who complete the prescribed course in Civil Engineering, are entitled to the degree of Civil Engineer.

Students who complete the course in Mining and Metallurgy, are entitled to the degree of Mining Engineer.

Students who hold a first grade certificate, approved by the State Superintendent of Common Schools for the State of Wisconsin, and also all graduates of Normal Schools of the State, are, after one year's study under the direction of the Faculty, entitled to appropriate University degrees.

Graduates of the Female College receive the same degrees as graduates of the other colleges for the same course of study.

APPARATUS AND CABINETS.

The University is provided with extensive and valuable Geological and Mineralogical Cabinets and collections in Natural History; also with well selected Philosophical and Chemical Apparatus.

Important additions have been made, the past year, to the means for teaching Chemistry and other Natural Sciences. As funds increase from the sale of lands, constant additions will be made to the Board of Instruction and to the means for teaching the sciences in all their applications to the Arts.

COMMERCIAL EDUCATION.

Arrangements have been made so that students in the University who desire to study any branch taught in the Madison Business College can do so for two-thirds the usual fees.

LITERARY SOCIETIES.

The Literary Societies—Athenæan, Hesperian and Castalian—are sustained with great interest, and furnish valuable aid in the intellectual training of the student. Each has a librury of several hundred volumes. Spacious and commodious rooms have been provided and furnished at the expense of the institution for these societies.

These societies admit to membership only students connected with the regular classes. Another, called the *Philomathean Society*, has been organized for Preparatory and University students.

ROOMS.

Private rooms, under certain restrictions, can be secured by gentlemen on application to the locating officer, at the opening of each term.

No student will be allowed to occupy a room until his bills for the term are settled.

Students from abroad have the preference in the assignment of rooms.

Those in the regular classes are allowed the choice of rooms, and in the order of the classes.

Regular students, in previous occupancy, if on the ground at the opening of the term, are permitted to retain their rooms, unless needed for those in higher classes.

Rooms are furnished, except stoves, at the expense of the students, who should bring their own bedding, towels, etc. Other furniture can be obtained here second-hand, or new, at moderate prices.

Students will not be allowed to board themselves, except in the North Dormitory Building.

Occupants of rooms are held responsible for all damages to the same.

Students not accommodated in the University, and not residing with their parents in Madison, will lodge and board in town, under such regulations as the Faculty may prescribe.

TERMS AND VACATIONS.

The Commencement Anniversary is on the Wednesday preceding the last Tuesday of June, and is followed by a vacation of nine weeks.

There are three terms in each year, and three vacations.

The first term opens on Wednesaday, nine weeks from Commencement, and continues until the Friday preceding the last Thursday in November. The second term commences on the third Wednesday after the close of the preceding term, and continues till the Friday preceding the third Wednesday of March. The third term commences on the second Wednesday after the close of the second term, and continues till the Wednesday preceding the last Tuesday in June.

REPORT OF BOARD OF VISITORS.

To the Board of Regents of the University of Wisconsin:

GENTLEMEN:—The undersigned, members of the Board of Visitors, having attended to the duties assigned us by your honorable body, beg leave to present the following report:

We found the University in a very prosperous condition. The Faculty and Instructors have performed their work with marked ability and faithfulness. They are entitled to your entire confidence and support.

The examinations of the classes evinced thorough instruction and earnest study. The classes of ladies showed a scholarship not inferior in any respect to that of the gentlemen.

The Department of Agriculture is well organized and well conducted. Its results, in time, will prove invaluable to the farmers, fruit growers, and gardeners of the State.

The Department of Military Science promises a happy success.

The Law Department is peculiarly fortunate. In addition to having able and thorough instructors, the students have free access to the State Library, and can frequently witness the proceedings in the several courts held at the Capital of the State. The examination of the class was well sustained. We were impressed with the value of previous scholarship in entering upon professional studies. The tendency to enter the learned professions without thorough preparation should be discouraged. The future bar and bench of our State are largely in the keeping of this Department of the University.

The Preparatory Department has been well taught. The pupils, certainly, give promise of future scholarship and usefulness. The want of academies in the state will necessitate the continuance of this department for the present; and hence the importance of its distinct and thorough organization. Its courses of study should be with special reference to the Scientific and Classical Colleges, and it occured to us that the standard of admission should be higher. This might lessen the number of pupils but it would secure better scholarship and an easier discipline. And your committee would earnestly recommend the selection of a Principal of this Department who should give his exclusive attention to its government and instruction. The Department thus organized and under the general supervision of the Government of the University, would, we believe, soon furnish a large number of well prepared students for its colleges.

Your committee would also suggest the propriety of allowing the ladies and gentlemen, pursuing the same studies, to recite in classes together. Accepting the fact that they are to be educated together, we fail to see the necessity of having a distinct department known as the "Female College." Such an arrangement would save the time and strength of the professors, and would doubtless accord with general public sentiment.

The Labaratory of the University is certainly a credit to the State. It is convenient and extensive, and must prove invaluable to the College or Arts. The Cabinet and Library are not all that is desired, but considering the age of the University and all the circumstances of the case, they will compare favorably with those of other similar institutions.

An Astronomical Observatory is a pressing need of the College of Arts, and we feel assured that as soon as the means at your command will justify the outlay, you will provide this as well as some other needed improvements.

We found the buildings and grounds of the University in good condition.

The subject of prizes and scholarships, as affording a stimulus to the students in the prosecution of the higher branches of education, is a matter we earnestly commend to your careful consideration.

The commencement exercises reflected great credit to the graduating classes, the Faculty, and the State.

In conclusion, your committee would congratulate your honorable body and the people of our rapidly growing State, on the auspicious beginning of a great and useful enterprise. It cannot be reasonably expected that in a State so new, with all of its institutions in a formative condition, that all the educational results of older and wealthier communities can be immediately realized. But patience, courage and a discriminating liberality, will crown your labors with great success.

Respectfully submitted,

H. C. TILTON,
C. H. RICHARDS,
WM. TEN BROEK,
ED. GRAHAM.

REPORT FROM LAW DEPARTMENT.

To the Hon. CHAS. S. HAMILTON, *President of the Board of Regents of the University of Wisconsin :*

I have the honor through you, to report to the honorable the Board of Regents, that the Law Department, during the past year has been very successful and promising.

There have been in all twenty-three students in the class, all but three of whom have passed a most thorough examination in the Supreme Court Room before the Judges and in the presence of the Bar and the Examiners, and acquitted themselves with great credit. The names of such as passed this examination have been reported to the Vice President, with a recommendation to the degree of LL. B.

The class have had most thorough instruction in all branches of the law, and have studied and labored with great zeal and industry, and give promise of becoming eminent in their profession, and in addition to excellent abilities and attainments, they are all of good habits and of high moral character. His Excellency, Governor Fairchild, has most kindly and considerately furnished the class with a room in the Capitol, for lectures, and the students have been treated kindly by the State Librarian, Prof. Conover, and his excellent assistant, in receiving at all proper times the great advantages of consulting the books in the Law Library.

All the authorities of the State have rendered this department great assistance and encouragement, for which the Class and the Faculty feel grateful.

The students, many of them are poor, and have struggled to attain a legal education to enter at once upon the duties and compensations of the profession. To those who, for the time, are unable to pay for their tuition, the full benefits of the course have been liberally extended, trusting them to pay when able to do so. None who could pay for their board and support, in the city, have been turned away on account of their inability to pay for their instruction. This course for the present has been deemed to be the better, until the Department shall have become well established and known. This, of course, for the time detracts somewhat from the compensation of the teachers, but in time will have the effect to bring the Department to a sustaining basis.

The prospect for the coming year is flattering, and it is expected a still larger class will avail themselves of the course. The reputation of this Department is daily becoming more extended, and through those who have already graduated it is expected many more will apply from year to year.

During the winter, while the Legislature is in session, it is quite inconvenient for the State to spare a suitable room in the capitol for the class, and it is respectfully suggested that the executive committee should have authority to procure a suitable room in some block around the park for that purpose. The class should be as near the State library as possible, as access to that is one of the chief advantages of the school.

All of which is respectfully submitted.

H. S. ORTON,
Dean of Law Faculty.

MADISON, June 20, 1871.

UNIVERSITY FARM.

REPORT BY PROF. W. W. DANIELLS.

To the Hon. Charles S. Hamilton, *President of the Board of Regents of the University of Wisconsin:*

Sir:—I have the honor to submit herewith the report of experiments upon the University Experimental Farm for the year ending October 31, 1871.

WHEAT.

White Winter, Touzelle Variety.—Seed imported from France, and furnished by the Department of Agriculture at Washington. A large, white, plump grain, weighing sixty-two pounds per bushel. Sample 11. Fifteen quarts (29 lbs.,) were sown Sept. 10, 1870 upon an area of 47.9 square rods. Protected from winds upon the west and north sides by growing timber. Mulched in December with coarse litter at the rate of twenty loads per acre. Harvested July 8, 1871. Drawn July 14. Threshed August 10. * Gross weight, 1,191 pounds. Weight of grain 392 pounds. One bushel weighs 59¾ pounds. Yield per acre, 23.38 bushels. Per cent. of grain to gross weight, 32.9. One pound seed yields 13½ pounds.

This variety was first tried the previous year, upon land but partially protected upon the west side, from the winter winds. It there winter-killed entirely. Upon second trial, in a situation more favorable for protection from cold winds, and, with a more favorable winter, it yields well. The straw appears weak, and the grain is darker than the seed sown. The experiment will be continued until its worth as a variety for cultivation is well proven.

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* Taken at the time of drawing from the field.

Red Bearded Saisette Winter Wheat.—Seed imported from France, and furnished by Department of Agriculture. Sample 12. One bushel weighs 62 pounds. Fifteen quarts (29 lbs.) sown September 10, 1870, upon 47.9 square rods. Protected from winds, and mulched the same as Touzelle variety. Harvested July 8, 1871. Drawn July 14. Threshed August 7. Gross weight, 1,287 pounds. Weight of grain, 399 pounds. One bushel weighs 60¼ pounds. Yield per acre, twenty-two bushels. Per cent. of grain to gross weight, thirty-one. One pound seed yields 13.7 pounds grain.

Besides repeating the above experiments, several other varieties of winter wheat are now in cultivation. Among these is the "Fultz" wheat, a new and promising variety, originated by Mr. Abram Fultz, of Mifflin county, Pennsylvania, the seed of which has been distributed this year by the Government Department of Agriculture.

The question whether winter wheat may be grown in Wisconsin with profit is still unsettled. The experience of the past year would lead to the belief that it may; but a more rigorous winter, and less favorable spring may bring as strong evidence to prove that the climate is too severe. Mr. A. G. Tuttle, of Baraboo, says that after twenty years' experience, he regards it as sure a crop in the Baraboo valley as is spring wheat. The very fine sample from that vicinity on exhibition at the State Fair this fall, shows at least, that as excellent wheat may be grown there, as can be grown anywhere in the same latitude. The greater value of winter wheat demands for it a thorough trial of all hardy varieties, before deciding that spring wheat alone can be relied upon for a sure crop.

SPRING WHEAT.

To test the comparative values of different amounts of seed to the acre, six plats, each containing one-fourth acre, were sown to mammoth variety April 4. The seed—sample 4—was raised upon University farm in 1870. One bushel weighed sixty and three-fourths pounds. The plats were all adjacent, and cultivation was the same on all.

PLAT 1—*Three-fourths bushels to the acre*—Harvested July 24. Drawn July 28. Threshed October 26. Weight of straw and grain, 820 pounds. Weight of grain, 263 pounds. One bushel weighs 60 1-3 pounds. Yield per acre, 17½ bushels. Per cent. of grain to weight of straw and grain, 32. One pound of seed yields 23.1 pounds.

PLAT 2—*One bushel to the acre*—Harvested July 24. Drawn. July 28. Weight of straw and grain, 899 pounds. Threshed October 27. Weight of grain, 297½ pounds. One bushel weighs 60.6 pounds. Yield per acre, 19.83 bushels. Per cent. of grain to weight of straw and grain 33. One pound seed yields 19.59 pounds.

PLAT 3.—*One and one-fourth bushels seed to the acre.*—Harvested July 24. Drawn July 28. Threshed November 4. Weight of straw and grain, 1,146 pounds. Weight of grain 332¾ pounds. One bushel weighs 60 pounds. Yield per acre, 22.18 bushels. Per cent. of grain to weight of straw and grain, 29. One pound seed yields 17.53 pounds.

PLAT 4.—*One and one-half bushels seed to the acre.*—Harvested July 24. Drawn July 28. Threshed Nov. 1. Weight of straw and grain, 1,340 pounds. Weight of grain, 396½ pounds. One bushel weighs 60.36 pounds. Yield per acre 26.16 bushels. Per cent. of grain to weight of straw and grain, 29. One pound seed yields 17.4 pounds.

PLAT 5.—*One and three-fourths bushels seed to the acre.*—Harvested July 22. Drawn July 29. Threshed October 31. Weight of straw and grain, 375¾ pounds. One bushel weighs sixty pounds. Yield per acre, 24¾ bushels. Per cent. of grain to gross, 28. One pound seed yields 14¼.

PLAT 6—*Two bushels seed to the acre.* Harvested July 22. Drawn July 29. Threshed October 5. Weight of straw and grain, 1,412 pounds. Weight of grain, 455¼ pounds. One bushel weighs 60⅛ pounds. Yield per acre 30⅛, bushels. Per cent. of grain to weight of straw and grain, 32. One pound seed yields 14.98 pounds.

TABLE *showing the results of experiments with different amounts of seed wheat to the acre.*

Bushels of seed to to the acre.	Time of harvesting.	Weight of straw and grain.	Weight of grain.	Yield per acre.	Weight per bushel.	Per cent. of grain to weight of straw and grain.	One pound seed yields.
		lbs.	*lbs.*	*bushels.*	*lbs.*		*lbs.*
¾	July 24	820	263	17.53	60.25	32	23.11
1	July 24	899	297½	19.83	60.6	33	19.59
1¼	July 24	1,146	332¾	22.18	60	29	17.53
1½	July 24	1,340	396½	26.16	60.36	29	17.4
1¾	July 22	1,330	375¾	24.75	60	28	14 1-7
2	July 22	1,412	455¼	30⅓	60½	32	14.98

This table, with the exception of plat five, shows an increase in yield as the amount of seed is increased. The plats upon which these experiments were tried were adjacent, and to all appearance equally fertile. The variation in the yield of plat five, may, doubtless, be attributed to the fact that it was in a more exposed situation, and more badly laid by the wind, for in both four and six, the weight of straw and grain and the weight of grain are greater than in it. The table also shows that the yield of one pound of seed decreases as the amount of seed and yield per acre increase. The increased yield of one seed was plainly visible before the grain was harvested, in the greater amount of " stooling " of that which was thinly seeded. The uniformity in the weight of a bushel of the grain from each plat is quite remarkable, while the variation in the per cent. of grain to the weight of the straw and grain, is such as to show that it does not depend upon the amount of seed. Some English agriculturists claim to get better results upon land in high culture, with thin, than with thick seeding. So far as we may judge from a single experiment, thick seeding is best upon our lands which are in but an indifferent state of cultivation.

COMPARATIVE VALUE OF DRILLING AND BROADCAST SOWING.

One-half acre was sowed by each method, to Mammoth wheat, weighing 60¾ pounds per bushel, April 13, two bushels to the acre.

1.—*Broadcast.* Harvested July 24. Weight of straw and grain 1,370 pounds. Threshed Sept. 18. Weight of grain 482¾ pounds. One bushel weighs 61½ pounds. Yield per acre 16.09 bushels. One pound seed yields 7.94 pounds. Per cent. of grain to weight of straw and grain 35.

This plat was adjacent to a grove, and was very badly injured by blackbirds.

2.—*Drilled.* Harvested July 24. Threshed Sept. 27. Weight of straw and grain 1,590 pounds. Weight of grain 658½ pounds. One bushel weighs 62½ pounds. Yield per acre 21.95 bushels. Per cent. of grain to weight of straw and grain 41. One pound seed yields 10.97 pounds.

The drill did not distribute the seed evenly. Some portions were too thick and others too thin.

To try the effect of double breaking, one-half acre of heavy blue grass sward was broken with two plows, April 11. The first plow turned a furrow three inches in depth, the second turning a furrow three inches deeper from the bottom of first furrow, entirely out and upon the top of that turned by the first plow. Sowed to two bushels per acre of mammoth wheat, April 13. Harvested July 26. Straw short. Threshed August 2. Weight of straw and grain, 1,054 pounds. Weight of grain, 387¼ pounds. One bushel weighs 57½ pounds. Yield per acre, 12.9 bushels. Per cent. of grain to weight of straw and grain, 37. One pound of seed yields 6.4 pounds. This wheat was also partially destroyed by blackbirds.

There have also been in cultivation small samples of the following varieties:

White Australian spring wheat.

Polish wheat.

Calusa club, from Calusa county, California.

Two unnamed California varieties.

The amount of seed of these varieties in our possession was too small to get any accurate results. They will be tried another year with larger amounts of seed.

OATS.

Comparison of different varieties.—Six one-fourth acre plats were sown broadcast, April 18, to three-quarters of a bushel of each of the following varieties:

White Norway.—Weight of one bushel of seed, 33 pounds. Harvested July 20. Weight of straw and grain, 1,106 pounds. Threshed October 14. Weight of grain, 402¾ pounds. One bushel weighs 33.49 pounds. Yield per acre, 50.32 bushels. Per cent. of grain to weight of straw and grain, 36. One pound of seed yields 16.27 pounds.

Black or Ramsdell Norway.—Weight of one bushel of seed, 30½ pounds. Harvested July 25. Threshed August 21. Weight of straw and grain, 1,248 pounds. Weight of grain, 522 pounds. Weight of one bushel, 32 pounds. Yield per acre, 65¼ bushels. Per cent. of grain to weight of straw and grain, 41.8. One pound of seed yields 22.6 pounds.

Surprise.—Weight of one bushel seed, 32 pounds. Harvested July 17. Threshed September 14. Weight of straw and grain, 1,171 pounds. Weight of grain, 601 pounds. One bushel weighs 38 pounds. Yield per acre, 75⅛ bushels. Per cent. of grain to weight of straw and grain, 51. One pound of seed yields 25 pounds.

Common.- One bushel of seed weighed 30 pounds. Harvested July 25. Threshed July 31. Weight of straw and grain, 1,248 pounds. Weight of grain, 498¼ pounds. One bushel weighs 34¾ pounds. Yield per acre, 62¼ bushels. Per cent of grain to weight of straw and grain, 40. One pound of seed yields 22.1 pounds.

Probsteir.—Weight of one bushel of seed, 34¾ pounds. Harvested July 25. Threshed September 13. Weight of straw and grain, 1,418 pounds. Weight of grain, 587 pounds. One bushel weighs 37 pounds. Yield per acre, 73⅛ bushels. Per cent. of grain to weight of straw and grain, 40.7. One pound of seed yields 22.5 pounds.

Potato.—One bushel of seed weighed 29 pounds. Harvested July 26. Threshed September 9. Weight of straw and grain, 1,276 pounds. Weight of grain, 376½ pounds. One bushel weighs 34½ pounds. Yield per acre, 47⅙ bushels. Per cent. of grain to weight of straw and grain, 29. One pound seed yields 17.3 pounds.

Of the following varieties smaller areas were sown at the same time:

White Schonen.—Seed from Department of Agriculture at Washington. 774 square feet sown with 1 pound 5 ounces of seed. Harvested July 24. Threshed July 29. Weight of straw and grain, 122 pounds. Weight of grain, 44¾ pounds. One bushel weighs 30½ pounds. Yield per acre, 79.7 bushels. Per cent. of grain to weight of straw and grain, 36.6. One pound of seed yields 34 pounds. The grain was badly lodged, which probably accounts for the light weight.

Bohemian.—A variety without hulls, donated by Morrow & Brother, of the *Western Farmer*. 1,078 square feet sown with 17 ounces of seed. Sample 14. Harvested July 24. Badly lodged, and rusted where down. Threshed July 29. Weight of straw and grain, 150 pounds. Weight of grain, 24 pounds. One bushel weighs 40½ pounds. Yield per acre, 30.8 bushels. One pound seed yields 22.6 pounds. Per cent. of grain to weight of straw and grain, 16.

Table *showing the result of the experiment with the different varieties of Oats.*

Variety.	Time of harvesting.	Weight of straw and grain.	Weight of grain.	Yield per acre.	Weight per bushel.	Per cent. of grain to gross weight.	One pound of seed yields.
		lbs.	*lbs.*	*bus.*	*lbs.*		*lbs.*
White Norway....	July 20	1,106	402¾	50.32	33.49	36	16.27
Black Norway.....	July 25	1,248	522	65.25	32	41.8	22.6
Surprise	July 17	1,171	601	75.12	38	51	25
Common..........	July 25	1,248	498¼	62.25	34¾	40	22.1
Probsteir	July 25	1,418	587	73.33	37	40.7	22.5
Potato............	July 26	1,276	376½	47.16	34½	29	17.3
White Schonen ...	July 24	122	44¾	79.70	30½	36.6	34
Bohemian	July 24	150	24	30.80	40½	16	22.6

Placing the common oats at 100, as a standard of comparison in yield per acre, gives the following comparative yield:

White Norway..	81
Black Norway..	104
Surprise	120
Common....................	100
Probsteir...............................	118
Potato	76
White Schonen..	128
Bohemian...	51

DRILLING AND BROADCAST SEEDING.

One-half acre of ground was sowed April 14, to common oats, by each method, giving the following results:

No. 1.—*Broadcast.*—Harvested July 24. Weight of straw and grain, 1,444 pounds. Weight of grain, 705 pounds. One bushel weighs 34⅔ pounds. Yield per acre, 44.06 bushels. One pound seed yields 18.8 pounds. Per cent. of grain to weight of straw and grain, 48.

No. 2.—*Drilled.*—Harvested July 21. Weight of straw and grain, 1,414 pounds. Weight of grain, 709¾ pounds. One bushel weighs 36½ pounds. Yield per acre, 44.35 bushels. One pound seed yields 18.92 pounds. Per cent. of grain to weight of straw and grain, 50.

TABLE *comparing results of broadcast seeding, and drilling oats.*

How sowed.	Time of havesting.	Weight of Straw and grain	Weight of grain.	Yield per acre.	Weight per bushel.	Per cent. of grain to gross weight.	One pound seed yields.
		lbs.	*lbs.*	*bushels.*	*lbs.*		*lbs.*
Broadcast	July 24	1,414	705	44	34⅔	48	18.8
Drilled	July 21	1,414	709¾	44.35	36¼	50	18.92

Both plats were injured by the innumerable hosts of blackbirds that attacked all of our crops.

EXPERIMENT WITH DIFFERENT AMOUNTS OF SEED PER ACRE.

Four adjoining plats of one half acre each were sown broadcast, April 4, to common oats as follows:

No. 1.—*One and one half bushels of seed per acre.* Harvested July 25. Weight of straw and grain, 1,456 pounds. Weight of grain, 788½ pounds. One bushel weighs 24⅝ pounds. Yield per acre, 49.28 bushels. Per cent. of grain to weight of straw and grain, 53. One pound seed yields 35 pounds.

No. 2.—*Two bushels of seed per acre.*—Harvested July 25. Weight of straw and grain, 1,338 pounds. Weight of grain, 707½ pounds. One bushel weighs 33½ pounds. Yield per acre, 44½ bushels. One pound seed yields 23½ pounds. Per cent. of grain to weight of straw and grain, 52.8.

No. 3.—*Two and one half bushels of seed to the acre.*—Harvested July 25. Weight of straw and grain, 1,592 pounds. Weight of grain, 709½ pounds. One bushel weighs 32½ pounds. Yield per acre, 44.34 bushels. Per cent. of grain to weight of straw and grain, 44. One pound of seed yields 15¾ pounds.

No. 4.—*Three bushels of seed to the acre.* Harvested July 17. Weight of straw and grain, 1,628 pounds. Weight of grain, 827⅜ pounds. One bushel weighs 35½ pounds. Yield per acre, 51.72 bushels. Per cent. of grain to weight of straw and grain, 50. One pound of seed yields 18.39 pounds.

TABLE *showing results of experiment with different amounts of seed Oats to the acre.*

Bushels of seed per acre.	Weight of straw and grain.	Weight of grain.	Yield per acre.	Weight per bushel.	Per cent. of grain to gross weight.	One pound of seed yields.
1½	1,456 lbs.	788⅛ lbs.	49.28 lbs.	34⅜ lbs.	53	35 lbs
2	1,338 lbs.	707⅛ lbs.	44¼ lbs.	33½ lbs.	52.8	23½ lbs
2½	1,592 lbs.	709⅛ lbs.	44⅛ lbs.	32½ lbs.	44	15¾ lbs
3	1,628 lbs.	827⅜ lbs.	51¾ lbs.	35½ lbs.	50	18 2-5

The discordant result shown by this experiment is owing to the different conditions of the soil, a part of which had been in cultivation with corn the previous year, and a part with wheat. The experiment shows how difficult it is to get all the conditions of the soil such as to give uniform results, when cultivated by the same method. In order that experiments may be reliable, everything must be uniform, but the one point which the experiment is intended to establish. For example, in the above experiment, the only variable element that should exist is the amount of seed per acre; all other conditions must be the same. It is very difficult to get two adjoining plats that have the same degree of fertility, which necessitates the testing of land to ascertain its comparative fertility before using it for experimental purposes.

The following experiment was tried for the purpose of comparing the value of well cleaned seed with seed as commonly sowed:

One-fourth of an acre of ground was sown to three-fourths bushels by measure of common oats, *as taken from the bin*, April 22. One bushel of seed weighed 27½ pounds. Harvested July 25. Threshed August 18. Weight of straw and grain, 864 pounds. Weight of grain, 350 pounds. One bushel weighs 33½.

Yield per acre, 43¾ bushels. One pound seed yields 17.2 pounds. Per cent. of grain to weight of straw and grain, 40.5.

An equal area was sown at the same time to three-fourths bushels by measure of common oats, *well cleaned.* One bushel of seed weighed 30 pounds. Harvested July 25. Threshed August 18. Weight of straw and grain, 910 pounds. Weight of grain, 386¼ pounds. Weight of one bushel, 35½ pounds. Yield per acre, 48¼ bushels. One pound of seed yields 17.1 pounds. Per cent. of grain to weight of straw and grain, 42.4.

The only difference in the cultivation of these two plats, was cleaning the seed of the latter of all chaff and light grain. The effect of cleaning, as shown by this experiment, amounts to 4½ bushels of grain per acre, a measured bushel of which weighs 2 pounds more than that of the uncleaned. Had heavier oats been used, the difference would probably have been less.

A plat of one-fourth of an acre adjoining the above plats, was sown at the same time to three-fourths bushel by measure of a mixture of equal parts of White and Black Norway, Surprise, Potato and common oats, weighing thirty-two pounds per bushel. Harvested July 25. Threshed August 18. Weight of straw and grain, 964 pounds. Weight of grain, 357 pounds. Weight of one bushel, 34½ pounds. Yield per acre, 44.7 bushels. One pound seed yields 14.9 pounds. Per cent of grain to weight of straw and grain, 37.

TABLE, *showing at a glance the results obtained from these experiments:*

Kind of Seeds.	Weight of seed per bushel.	Weight of product per bu.	Yield Per Acre.	Yield of one Pound Seed.	Per cent. of Grain to entire product.
Uncleaned	27¼	33½	43¾	17 1-5	40½
Cleaned	30	35½	48¼	17 1-10	42 2-5
Mixed	32	34½	44 7-10	14 9-10	37.

Two adjoining plats of equal area were sown at the same time with seed of the same variety. Upon one of these plats well rotted muck was spread as uniformly as possible, to the depth of half an inch. The other had no fertilizer applied. The yield of these plats was as follows:

	Yield per Acre.	Weight of Product per bu.	Yield of 1 lb. Seed.
No. 1 with muck..............................	52 bu.	35⅞ lbs.	19.4 lb
No. 2 without fertilizer	49.4	34¼ lbs.	18.4 lb

Giving a yield of 2.1 bushels per acre of heavier grain to the fertilized plat.

BARLEY.

Chevalier.—One half acre sowed broadcast, April 18, to one-one-half bushels, which weighed 46 pounds per bushel. Harvested July 28. Weight of straw and grain, 3,559 pounds. Weight of grain, 1,043 pounds. One bushel weighed 48.63 pounds. Yield per acre, 43.45 bushels. Per cent. of grain to weight of straw and grain, 29. One pound seed yields 15.1 pounds.

Probsteir.—Seed from Department of Agriculture at Washington. Two pounds and 11 ounces sowed April 18, upon 1,375 square feet of ground. Harvested July 24. Weight of straw and grain, 334 pounds. Weight of grain 76½ pounds. One bushel weighs 48½ pounds. Yield per acre, 51.4 bushels. One pound seed yields 28.4 pounds. Per cent. of grain to weight of straw and grain, 23.

Saxonian.—Seed from Department of Agriculture at Washington; 2 pounds and 10 ounces sowed April 18, upon 1,651 square feet. Harvested July 24. Weight of straw and grain, 285 pounds. Weight of grain, 78½ pounds. One bashel weighs 47½ pounds. Yield per acre, 45.9 bushels. One pound seed yields 29.9 pounds.

These varieties of two-rowed barley, were imported from Europe by the Government Department of Agriculture, on account of their valuable malting properties. They promise to be valuable varieties for general cultivation, although further trial is needed to fully prove their value. The quantity of seed at our disposal of Probstier and Saxonian varieties, was too small for an accurate test-experiment of their yield. The amount of seed that we now have, will enable us to obtain more definite results another year.

CORN.

COMPARISON OF DIFFERENT VARIETIES.

The following table gives the results of an experiment with five varieties that were planted May 12; distance apart, 3½ feet by 3½ feet, three grains to the hill. Cultivation the same with all varieties. Of the White Australian, about one dozen hills were accidently destroyed in July:

VARIETY.	First ripe ears.	Time of harvesting.	Yield per acre.	Per cent of ears to gross weight.
Early Dent	Aug. 5	Aug. 25	49.58 bu	43
Dutton	Aug. 11	Aug. 25	47.12 bu	33
Sanford	Sept. 5	Sept. 5	45.69 bu	22
Cherokee	Aug. 28	Sept. 5	56.58 bu	32
White Australian	Aug. 17	....	72.49 bu	42

The yield per acre is given in bushels of ears weighing 75 pounds each, and was taken as the corn was drawn from the field. The White Australian corn is a new variety not yet introduced into general cultivation. The following quotation pertaining to its history, is from the Transactions of the Colorado Agricultural Society for 1868:

"The White Australian Corn is a new variety of flint corn, brought to this Territory from Salt Lake about two years since. We are told it came originally from Australia, * * * and is said to be peculiarly adapted to high, dry climates."

Seed was obtained of the Secretary of the Colorado Agricultural Society and taken to Northern Illinois in 1870, where it ripened in 96 days. It yields abundantly, as will be seen by the above experiments. It has the appearance of being a new variety, as its characteristics seem to be hardly fixed, a part of it being eight rowed, and a part 12 rowed. It is a very soft corn, the kernels crushing more easily than the common yellow dent. My impressions of it after a single years' trial, are very favorable.

The Cherokee corn also promises well, although the past year's experience proves much less for it than was claimed by its more ardent admirers. But I believe it to be a valuable addition to the list of varieties that are worthy of cultivation.

The following varieties were planted May 16, three grains to the hill; distance apart four feet by four feet:

VARIETY.	First ripe ears.	Time of harvesting.	Days from planting to ripeneng.	Yield per acre.
				bush.
White Australian	Aug. 28	Aug. 31	107	44
Dutton	Aug. 14	Aug. 26	102	31.53
Sanford	Sept. 7	Sept. 27	134	32.23
Blue Australian	Aug. 22	Aug. 27	103	36.43
Pearl Pop Corn		Sept. 15	122	37.32
Early Yellow Pop Corn		July 15	60	9.24
Joint Pop Corn		Sept. 15	122	14.62

The smaller yield of White Australian, Dutton and Sanford varieties, in this than in the preceding experiment, is owing partly to the greater distance apart, and partly to the situation, which, in this, was a steep northern exposure, and in the preceding was southern.

" Blue " Australian is the product of blueish kernels that were selected from White Australian.

In all of these experiments, a bushel is taken as 75 pounds at the time of drawing from the field. The moisture and weight of cobs being estimated at 15 pounds. The amount of shrinkage that corn will undergo, will depend greatly upon the season, and will be much less in as dry a year as the past, than in a wet year.

To ascertain the actual amount of shrinkage, 100 pounds (as weighed when drawn from the field,) of several of the above varieties, have been stored away. When they are thoroughly dry they will be again weighed, then shelled and the weight of shelled corn taken as the true per cent. of corn for the past year. A repetition of this experiment for several years will give the average per cent. of shelled corn to corn in the ear, as weighed at the time of husking.

INFLUENCE OF TIME OF SAVING SEED.

This experiment began in 1869, by selecting the earliest ripening ears from a field of Dutton corn, and at the time of husking, selecting other seed in the ordinary manner of saving seed corn. Adjacent plats were planted in 1870 with seed saved by each method, and seed again saved as before, from the product of seed saved by the same method. This seed of the second year was planted in two adjacent plats, May 6, 1870, distance apart three by four feet, three grains to a hill, giving the following results:

FROM SEED SAVED.	Time of ripening.	Yield per acre.
At time of husking...	Aug. 14	42.54 bu.
From first ripe ears	Aug. 10	37.51 bu.

There is here a difference of four days in the time of ripening, in favor of the seed of first ripe ears, but a difference in the yield of five bushels per acre in favor of the product of later ripening ears. The general appearance of the latter was also better.

EXPERIMENTS WITH EQUAL AMOUNTS OF SEED AT DIFFERENT DISTANCES APART.

Equal areas were planted April 28, to Sanford corn, as follows:

Plat 1.........	hills 13 inches apart..........	1 grain to the hill.
Plat 2.........	hills 26 inches apart..........	2 grains to the hill.
Plat 3.........	hills 52 inches apart..........	4 grains to the hill.

The rows were four feet apart, and cultivation the same with all. The corn was ripe August 26, and gave the following yield per acre :

Plat 1	48.27 bushels.
Plat 2	45.00 bushels.
Plat 3	39.36 bushels.

The cost of cultivation of numbers 1 and 2 would be more than that of number 4, as more of it must be done by hand, while the yield is greatly in favor of a less distance between the hills, and fewer stalks in a hill.

SEED FROM TIPS, MIDDLE AND BUTTS OF EARS.

Three plats of equal area were planted May 6, respectively from seed grown in same manner in 1870. Distance apart 3x4 feet; three grains to the hill, of New England variety. Cultivation uniform in each.

The results are shown in the following table:

Seed from	Time of ripening.	Yield per acre.	Aver. length of 25 longest ears.	Average Circumference at butts of 25 largest ears.
Butts	Aug. 21	62.66 bu	9 inch.	6¼ inch.
Middle	Aug. 21	60.95 bu	9.1 inch.	6 inch.
Tips	Aug. 21	58.11 bu	9.2 inch.	5.9 inch.

No difference was visible in time of ripening, but in the yield a perceptible difference was shown in favor of seed from the butts of the ear. The length of twenty-five of the longest ears, and the circumference at the butts of twenty-five of the largest ears from each of the three plats, were taken. The results of these measurements are quite curious, indicating that the average length of the ears was greatest in that raised from seed from the tips, while the average size around the butts was greatest in the product of seed from the butts of the ear. In each case, as well as in the yield per acre, the product of seed from the middle of the ear was nearly a mean between the other two. The ends of the ears were so badly eaten by blackbirds that it was impossible to tell whether the ears from either of these plats were filled out better than from the others. This trial indicates that in the second year of the experiment, there is already a difference in the yield per acre, and an appreciable tendency to change the form of the ear, in the product of seed taken from different parts of the ear. The tendency to change seems to be sudden, and gives an interest to the experiment that will make it well worthy of several years' further trial.

POTATOES.

The following varieties have been in cultivation for the purpose of comparison. Planted May 8 in rows 3½ feet apart. Cultivation uniform.

VARIETY.	Dist. apart in rows.	Time of ripening.	Yield per acre in bushels.	Size, etc.
	Inches			
Early Goodrich	16	Aug. 1	176 1/8	Fair.
Seedling from Early Goodrich	16	Aug. 1	124 1/3	Fair.
Early Rose	14	Aug. 1	219 4-5	Fair.
Bresee's King of the Earlies	16	Aug. 1	171 1/8	Med., smooth.
Excelsior	16	Aug. 12	213 4-5	Fair, smooth.
Vandervere	16	Aug. 14	152 1/2	Small.
Titicaca	16	Aug. 15	135 1-9	Small, rough.
Philbrick's Early White	16	Aug. 18	191 2/3	Med., rough.
Andes	16	Aug. 20	127 1/8	Small.
White Chili	18	Aug. 20	86 1/2	Small.
Buckeye	18	Aug. 20	229	Large, rough.
Wisconsin seedling	16	Aug. 25	208 1/2	Small.
White Rose	16	Sep. 1	185 1-5	Med., smooth.
Harrison	16	Sep. 1	322	Fair.
Kackelhoffer	18	Sep. 1	103 2/3	Large.
Shaker's Fancy	16	Sep. 1	142 2/3	Large.
Forfarshire red	16	Sep. 1	241 1/2	Med., rough.
Early Shaw	16	Sep. 1	302 1/3	Large, sm. fine
White Peach Blow	18	Sep. 5	270	Med., rough.
Calico	16	Sep. 10	193 1/2	Large,
Jenny Lind	16	Sep. 10	259 1/8	Small, rough.
Alaska Blue	16	Sep. 14	138 1/4	Small.
Peerless	18	Sep. 14	246 1/8	Large, fine.
Peachblow	20	Sep. 18	140 1/4	Medium.
Santo Domingo	16	Sep. 1	147 5/8	Large, smooth
Strawberry Bloom	16	Aug. 18	344.38	Small, rough.

The last two varieties were cultivated under the above names, the past year, the true names having been lost.

The distance apart in the row was varied to correspond as nearly as possible with the known habits of growth of the several varieties. Those with small tops that grow compact in the hill, like the Early Rose being planted near together, while those with with large tops, as the Peachblow, were planted farther apart.

The Colorado potato beetles were more troublesome early in the season than ever before. The remedy that proves most successful with us, has been hand-picking. With constant attention the potatoes upon the University Farm have been injured very little, if any, although there were several gardens in the vicinity where no measures were taken to destroy them.

We did not use Paris Green, the only common remedy used, for the reasons given in my repert last year, that it is a poison, and should not be put upon the soil.

Many of the above varieties of potatoes are quite new, or at least little known among farmers.

The "Peerless" and "Bresee's King of the Earlies," are two varieties that were sold last spring at very high prices. The former bids fair to be a valuable late potato and a good yielder.

The King of the Earlies is no earlier than the Early Rose, but is of good quality, prolific, and doubtless will prove a valuable addition to the list of early potatoes. The "White Rose" will probably prove a good late variety, but instead of being "bug-proof," as advertised, is as liable to attack by the potato beetle, as the Early Rose. The general value of the different varieties may be told by the remarks on size and appearance above.

IMPROVEMENT OF SOILS BY MECHANICAL MEANS.

For the purpose of testing the comparative value of different depths of plowing, an experiment has been begun upon four plats of an acre each, to be cultivated through several years as follows:

No. 1 to be plowed to the depth of five inches only.

No. 2 to be plowed to the depth of twelve inches.

No. 3 to be plowed twenty inches in depth, by trench-plowing.

No. 4 to be plowed twenty inches in depth, by subsoiling.

In all respects other than those named, the cultivation is to be uniform on all.

Nos. 1 and 2 were cultivated the past summer in the prescribed manner.

No. 3 was plowed to the depth of twelve inches only.

No. 4 was plowed twelve inches in depth, and subsoiled four inches deeper.

The four plats were planted May 15th to Early Yellow Dent Corn, four feet apart each way, three grains to the hill.

The following table shows the results of the first year's trial:

Plat 1 yields	55.4 bushels.
Plat 2 yields	50.65 bushels.
Plat 3 yields	44.95 bushels.
Plat 4 yields	42.21 bushels.

The yield diminishes from one to four, a result that cannot be attributed entirely to the method of cultivation, as for want of a suitable trench plow it was found impossible to plow No. 3 more than twelve inches in depth, so that in all respects the cultivation of Nos. 2 and 3 have been the same, and the plats are adjacent. Plats 3 and 4 will be deepened as fast as is practicable.

I would acknowledge my indebtedness to Mr. H. H. McAfee, Farm Superintendent, for the careful and skillful manner in which he has attended to the carrying on of these experiments, even to the most minute particular. I have also obtained from Mr. McAfee the following particulars:

The average yield per acre of the different crops upon the University Farm has been as follows:

Winter wheat	22 1-2	bushels.
Spring wheat	22	bushels.
Oats	50 9-10	bushels.
Corn	53	bushels.
Barley	43 1-3	bushels.
Navy beans	17 2-5	bushels.
Potatoes	148	bushels.

Under Mr. McAfee's care, the garden formerly under the charge of the State Horticultural Society, has been moved to the garden near the Farm-house, and is now in a thriving condition.

There have been in cultivation the following vegetables, the seeds of which were furnished by the Department of Agriculture, at Washington, and which promise to be valuable varieties:

Beck's Prizetaker Pea.
Carter's Firstcrop Pea.
Prince Albert Pea.
Danvers Yellow Onion.
Knowles' Improved Imperial Sugar Beet.
Demar's Fine Dark Red Beet.
Deming's Early Beet.
Deep Blood-red Beet.
Long Orange Belgian Carrot.
Carter's Champion Orange Globe Mangel Wurtzel.
Dark Red Egyptian Beet.
Lenormand Cauliflower.
Schweinfurt Cabbage.
Seeley's Leviathan Celery.

And a large collection of flower seeds, some of the varieties of which are very valuable.

The Department of Agriculture of the University, has received during the year, the following donations:

From Moses H. Hussey, North Berwick, Me.—
    1 paper Trophy Tomato seed.

From Hon. David Atwood, M. C.—
    1 paper Opium Poppy seed.
    4 papers Havana Tobacco seed.
    1 paper Connecticut Seed Leaf Tobacco seed.

From Hon. J. C. Cover, U. S. Consul at Azores Islands, numerous varieties of flower seeds, most of which failed to germinate.

From Messrs. Morrow & Brother of the Western Farmer, Madison—

1 quart Bohemian Oats.
1 sample Polish Wheat.
1 pound White Rose Potatoes.
1 quart Cherokee Corn.

From H. H. McAfee, Esq.—

4 quarts White Australian Corn.

From Hon. R. B. Sanderson—

1 package White Australian Spring Wheat.

From Department of Agriculture, Washington—

Numerous varieties of Flower seeds.
Numerous varieties of Vegetable seeds.
1¾ bushels Fultz Winter Wheat.

From G. P. Peffer, Esq., Pewaukee, Wis.—

1 Apple-tree, a graft from the Pewaukee seedling, originated by himself.
Several fine fossil-casts of Pentamerus Oblongus.

From Geo. Wolf, Esq., Germantown, Wis.—

3 quarts Russian Wheat.

METEOROLOGY.

A copy of the Meteorological observations, for the year ending October 31, taken at the University, will be found accompanying this report.

CASUAL PHENOMENA.

The following are some of the most important observations of casual phenomena:

November 24 to 30. Indian summer; very warm.
December 22. Lake Monona frozen over.
December 24. Lake Mendota frozen over.

But four inches of snow during December. Thermometer 13° below zero on the morning of the 24th, the lowest temperature of the winter.

January, mild and uniform; twenty inches of snow during the month.

March 2, 2 A. M. Violent thunder and lightning, accompanied with sleet and hail.

April 1. Lake Monona free from ice.

April 2. Lake Mendota free from ice.

The opening of these lakes is twelve days earlier than in 1870.

April 30. Plum and cherry trees beginning to bloom.

Frost, morning of May 10.

First frost on morning of September 21, partially killing tomato and melon vines.

Mornings of September 28 and 29, harder frosts, destroying most of the tender vegetation.

October 31, first snow.

OBSERVATIONS.

The system adopted is that of the Smithsonian Institution, the hours of observation being 7 A. M., 2 P. M., and 9 P. M.

The temperature is given in degrees and tenths, F.

The amount of cloudiness is expressed by a number indicating the tenths of the sky overcast. The following abbreviations are used:

St.—Stratus.
Cu.—Cumulus.
Cir.—Cirrus.
Nim.—Nimbus.
Cu.-St.—Cumulo-stratus.
Cir.-St.—Cirro-stratus.
Cir.-Cu—Cirro-cumulus.

The direction of the wind is taken for eight points of the compass, the figures accompanying represent the force on a scale from 1, a very light breeze, to 10, a most violent hurricane. In the summary of observations, the percentage of winds from each direction is given for each month, and for the entire year.

The height of the barometer is indicated by inches and decimals, and corrected for the expansion above 32°.

The "force or pressure of vapor" expresses the weight of moisture in the air, by indicating in inches the height of a column of mercury that is sustained by it.

"Relative humidity" shows the per cent. of complete saturation existing at the time when the observation is made.

Latitude 43°, 5′ N.
Longitude 12°, 24′ W.
Height above the sea, 1,088 feet.

Maximum observed temperature for the year, 91°.
Minimum observed temperature for the year, 13°.
Range of observed temperatuje for the year, 104°.

W. W. DANIELLS,
Prof. of Agriculture and Analytical Chemistry.

NOVEMBER, 1870.

Day of Month.	THERMOMETER IN THE OPEN AIR.				RAIN OR SNOW.			
	7 A. M.	2 P. M.	9 P. M.	Mean.	Time of beginning of rain or snow.	Time of ending of rain or snow.	Amount of rain or melted snow in gauge, in inches.	Depth of snow, in inches.
1	37	58	48	47.6	....	....	....	....
2	42	58	42	48.6	....	....	....	....
3	35	49	43	42.3	....	....	....	....
4	45	45	44	44.6	7 A. M.	3 P. M.	.22	....
5	34	48	37	39.6	....	....	....	....
6	39	53	45	45.6	....	....	....	....
7	35	48	50	44.3	....	....	....	....
8	58	64	39	53.6	Night.	9 A. M.	.11	....
9	32	34	30	32.0	*........	....	....	....
10	26	42	35	34.3	....	....	....	....
11	33	48	40	40.3	....	....	....	....
12	39	58	49	48.6	....	....	....	....
13	42	39	38	39.6	1½ P.M.	7½ P.M.	.16	....
14	33	42	37	37.3	....	....	....	....
15	32	32	30	30.6	6 A. M.	10 A. M.	.04	....
16	25	37	33	31.6	....	....	....	....
17	35	41	35	37.0	....	....	....	....
18	25	33	30	29.3	....	....	....	....
19	22	35	36	31.0	....	....	....	....
20	35	37	32	34.6	....	....	....	....
21	24	25	20	23.0	....	....	....	....
22	19	34	30	27.6	....	....	....	....
23	28	54	33	31.6	....	....	....	....
24	26	44	35	35.0	....	....	....	....
25	29	47	33	36.3	....	....	....	....
26	35	53	50	46.0	....	....	....	....
27	41	55	42	46.0	....	....	....	....
28	41	48	43	44.0	....	....	....	....
29	35	43	36	38.0	....	....	....	....
30	33	45	37	38.3	....	....	....	....
Sum	......	......	......	......	....	....	.53	....
M'n.	......	......	......	38.6	....	....	....	....
Vv .	......	......	......	......	....	....	....	....

* First dash of snow.

NOVEMBER, 1870—continued.

CLOUDS.						WINDS.						
7 A. M.		2 P. M.		9 P. M.		7 A. M.		2 P. M.		9 P. M.		
Amount of cloudiness.	Kind of clouds.	Amount of cloudiness.	Kind of clouds.	Amount of cloudiness.	Kind of clouds.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Day of Month.
0	......	0	......	0	......	S	1	S	3	S	2	1
5	Cir ...	0	......	0	......	S	1	W ...	4	W ...	5	2
0	......	0	......	4	Cir ...	W ...	1	S.W .	2	S	3	3
10	Nim..	10	Nim..	0	......	S	1	......	0	N.W..	2	4
2	Cir ...	0	......	3	Cir ...	W ...	2	E	1	S. E..	1	5
10	Cu-st .	0	......	0	......	......	0	S. W .	1	N.W..	1	6
3	Cir ...	10	Cu st .	9	Cu ...	N.E ..	1	S. E..	4	S	4	7
10	Nim..	9	Cu ...	10	Cu ...	S	4	S.W .	4	W ...	4	8
10	Cu ...	3	Cu ...	0	......	W ...	4	N.W .	4	......	0	9
1	Cir ...	5	Cir ...	1	Cir ...	S	2	S.E ..	3	S.E ..	3	10
8	Cu-st .	4	Cir ...	9	Cir-cu.	S	2	S.W .	2	......	0	11
1	St....	1	Cir ...	9	Cu ...	S.W .	1	W ...	1	......	0	12
10	Cir-st.	10	Nim..	10	Nim..	N.W .	2	N. E..	2	N	3	13
0	......	5	Cu-st .	9	Cu ...	N.W .	3	N.W .	3	N	2	14
10	Nim..	10	Cu ...	1	Cu ...	S.W .	1	N.W .	3	N.W .	4	15
1	St....	1	Cir ...	2	Cir-cu.	N.W .	2	W ...	2	S.W .	4	16
10	Cu-st .	10	Cu-st .	5	St....	S.W .	2	N.W .	4	N.W .	4	17
0	......	0	......	1	Cu-st .	N.W..	4	N.W..	3	N.W..	2	18
10	Cu-st .	10	Cu-st .	1	Cu ...	S.W .	2	S	3	S	3	19
10	Cu ...	9	Cu ...	9	Cu-st .	S.W .	3	N.W..	4	N.W..	5	20
3	St....	4	Cu ...	0	......	N.W..	5	N	1	E	1	21
1	St....	6	Cu-st .	2	Cir-st.	S.W .	3	S.W .	2	W ...	2	22
9	Cu-st .	9	Cu-st .	9	Cir-st .	N	4	N.W..	2	N.W..	3	23
1	Cir ...	0	......	0	......	S.W .	2	S.W .	2	S.W .	3	24
1	St....	2	Cir ...	0	......	S	3	S	3	S.W .	2	25
9	Cir-st.	2	Cir-cu.	9	Cir-st .	S.W .	3	S.W .	3	S.W .	4	26
0	......	1	Cir ...	1	Cir ...	......	0	S.W .	1	S.E...	1	27
0	......	10	Cu-st .	10	Cu-st .	S	1	N	3	N	3	28
8	Cir-st .	2	Cir ...	2	Cir ...	N	3	N	2	N	1	29
0	......	3	Cir ...	0	......	......	0	......	0	S.W .	2	30
....	......	....	......	....	......	......	....	......	....	......	....	Sum
4	.....	4	......	4	......	......	2	......	2	......	2	M'n.
....	......	4	......	....	......	......	....	......	2	......	....	Av .

NOVEMBER, 1870—continued.

Day of the Month.	BAROMETER HEIGHT REDUCED TO FREEZING POINT.				FORCE OF PRESSURE OF VAPOR IN INCHES.			RELATIVE HUMIDITY OR FRACTION OF SATURATION.		
	7 A. M.	2 P. M.	9 P. M.	Mean.	7 A. M.	2 P. M.	9 P. M.	7 A. M.	2 P. M.	9 P. M.
1	28.705	28.566	28.566	28.612	.184	.255	.285	85	53	85
2	28.454	28.460	28.504	28.571	.262	.178	.162	84	37	61
3	28.922	28.899	28.812	28.811	.169	.175	.164	84	50	59
4	28.769	28.812	28.985	28.822	.204	.275	.151	68	92	53
5	29.172	29.165	29.146	29.161	.101	.143	.157	51	43	71
6	29.175	29.228	29.266	29.223	.173	.295	.138	73	73	46
7	29.276	28.920	28.666	28.954	.127	.236	.283	62	70	78
8	28.418	28.278	28.580	28.425	.394	.403	.173	82	67	73
9	28.772	29.070	29.218	29.020	.162	.131	.167	89	70	100
10	29.257	29.121	29.032	29.153	.123	.113	.142	87	42	70
11	28.929	28.876	28.927	28.910	.150	.165	.139	80	49	56
12	28.833	28.854	28.927	28.871	.173	.160	.175	73	34	50
13	28.963	28.921	28.918	28.934	.113	.195	.165	42	82	72
14	28.950	28.910	28.911	28.923	.131	.119	.143	70	45	66
15	28.748	28.761	28.868	28.792	.149	.162	.148	84	89	89
16	28.897	28.915	28.885	28.899	.088	.116	.094	67	53	50
17	28.727	28.899	29.155	28.927	.127	.126	.120	62	49	61
18	29.268	29.247	29.217	29.244	.082	.076	.076	61	40	45
19	29.099	28.853	28.649	28.867	.118	.108	.123	100	53	57
20	28.819	28.802	29.041	28.887	.162	.178	.181	80	81	100
21	29.185	29.210	29.185	29.193	.094	.100	.108	73	74	100
22	29.023	28.825	28.825	28.892	.103	.138	.167	100	71	100
23	28.911	29.054	29.071	29.012	.185	.138	.131	88	71	70
24	29.069	29.010	28.985	29.020	.141	.087	.142	100	30	70
25	28.871	28.696	28.617	28.728	.123	.133	.162	77	41	80
26	28.535	28.453	28.550	28.546	.162	.146	.186	80	36	51
27	28.753	28.782	28.767	28.767	.147	.193	.199	57	44	74
28	28.774	28.842	29.047	28.887	.212	.236	.142	82	70	51
29	29.251	29.301	29.368	29.306	.142	.142	.149	70	51	71
30	29.367	29.282	29.195	29.281	.113	.182	.136	60	61	62
S'm.	....	....	....	....	......	......	......	....	....	...
M'n.	....	....	....	28.924	.152	.169	.157	75	57	69
Av.	....	....	....	....	......	.159	......	....	67	

DECEMBER, 1870.

THERMOMETER IN THE OPEN AIR.				RAIN AND SNOW.				
7 A. M.	2 P. M.	0 P. M.	Mean.	Time of beginning of rain or snow.	Time of ending rain and snow.	Amount of rain or melted snow in guage, in inches.	Depth of snow in inches.	Day of Month.
34	42	36	37.3	....	....	....	....	1
35	48	38	40.3	....	....	....	....	2
31	43	41	38.3	....	....	....	....	3
40	44	39	41.0	6 P. M.	....	....	....	4
41	37	36	38.0	....	8 P. M.	.28	....	5
30	36	33	33.0	Night.	....	.05	½	6
32	32	24	28.6	....	....	....	....	7
20	28	24	24.0	....	....	....	....	8
23	30	27	26.6	....	....	....	....	9
24	34	30	29.3	....	....	....	....	10
32	35	33	33.3	4 P. M.	....	....	....	11
30	. 32	32	31.3	....	7 A. M.	.19	2	12
32	35	29	32.0	....	....	....	....	13
24	28	24	25.3	....	....	....	....	14
16	26	21	21.0	....	....	....	....	15
22	30	25	25.6	....	....	....	....	16
25	33	28	28.6	....	....	....	....	17
18	29	24	23.6	....	....	....	....	18
20	25	26	23.6	....	....	....	....	19
6	8	4	6.0	....	....	....	....	20
−2	3	−2	0.8	....	....	....	....	21
−8	−2	−7	−5.6	....	....	....	....	22
−12	−5	−8	−8.3	....	....	....	....	23
−13	−2	−4	−6.3	....	....	....	....	24
5	16	6	9.0	5 A. M.	6 P. M.	.10	1	25
−8	6	6	3.0	....	....	....	....	26
12	27	26	21.6	....	....	....	....	27
10	12	7	9.6	....	....	....	....	28
.0	16	17	11.0	6 P. M.	Night.	.05	½	29
35	40	33	36.0	....	....	....	....	30
26	34	27	29.0	....	....	....	....	31
......	......	......	......	....	....	0.67	4	Sum
......	......	......	22.1	....	....	....	....	M'n.
......	......	......	......	....	....	....	....	Av.

DECEMBER, 1870—continued.

	CLOUDS.						WINDS.					
	7 A. M.		2 P. M.		9 P. M.		7 A. M.		2 P. M.		9 P. M.	
Day of Month.	Amount of cloudiness.	Kind of clouds	Amount of cloudiness.	Kind of clouds	Amount of cloudiness.	Kind of clouds	Direction.	Force.	Direction.	Force.	Direction.	Force.
1	4	Cir. . .	10	Cir-cu.	0	. . . . . .	S. W .	1	S. W .	2	W . . .	4
2	0	. . . . . .	0	. . . . . .	0	. . . . . .	W . . .	4	W . . .	4	W . . .	2
3	8	Cir-St.	9	Cir-cu.	0	. . . . . .	S. W. .	2	S. E. .	3	S	4
4	5	Cir-St.	10	Cu . . .	9	Cu . . .	W . . .	2	W . . .	1	E	1
5	10	Nim. .	10	Nim . .	10	Cu . . .	N. E. .	2	N. W.	3	N. W.	4
6	1	St. . . .	3	Cir-cu.	10	Cu . . .	. . . . . .	0	S.	3	S	5
7	10	Cu . . .	10	Cu . . .	10	Cu . . .	N. W.	4	N. W.	3	N. W.	4
8	10	Cu . . .	9	Cu . . .	10	Cu . . .	N. W.	1	S	1	S. E. .	3
9	1	St. . . .	9	Cu . . .	10	Cu . . .	S. E. .	2	W . . .	2	N	3
10	0	Fog. . .	10	Cu . . .	1	Cir . . .	. . . . . .	0	N. E .	2	N. E .	3
11	10	Cir-cu.	10	Nim. .	10	Nim. .	N. E. .	4	N. E. .	5	N. E .	5
12	10	Nim. .	10	Cu . . .	10	Cu . . .	N	4	N . . .	1	N. W.	2
13	10	Cu . . .	8	Cu . . .	10	Cu . . .	W . . .	2	W . . .	2	W . . .	4
14	10	Cu-St.	8	Cu . . .	10	Cu-st.	N. W.	4	N. W.	3	N. W.	3
15	0	. . . . . .	1	Cir . . .	1	St. . . .	N. W.	1	N. W.	2	. . . . . .	0
16	9	Cu . . .	9	Cir-st.	10	Cu . . .	. . . . . .	0	N. W.	1	W . . .	1
17	9	St. . . .	10	Cir-st.	10	Cu . . .	S. W. .	1	W . . .	2	W . . .	1
18	1	St. . . .	0	. . . . . .	1	St. . . .	S. W .	1	S. W.	2	S	3
19	10	Cir-St.	10	Cu . . .	8	Nim. .	S	1	W . . .	2	N	4
20	1	Cir-St.	1	Cir . . .	5	St. . . .	N. W.	4	W . . .	2	W . . .	3
21	0	. . . . . .	1	Cu . . .	0	. . . . . .	W . . .	2	W . . .	3	W . . .	3
22	0	. . . . . .	1	Cu . . .	0	. . . . . .	W . . .	3	W . . .	4	W . . .	2
23	0	. . . . . .	0	. . . . . .	0	. . . . . .	W . . .	3	W . . .	2	W . . .	2
24	0	. . . . . .	0	. . . . . .	0	. . . . . .	W . . .	3	W . . .	2	S. W.	1
25	10	Nim. .	10	Nim. .	0	. . . . . .	S	4	S	3	W . . .	2
26	0	. . . . . .	1	Cir . . .	1	St . . .	W . . .	3	S. W.	2	S. W.	3
27	1	St. . . .	8	Cu-st .	10	Cu . . .	S. W.	2	S. W.	2	N. W.	4
28	1	St. . . .	3	Cir-cu.	0	. . . . . .	N	3	N	3	. . . . . .	0
29	0	. . . . . .	10	Cu-st .	10	Nim. .	S	1	S	2	S	4
30	8	Cu St	10	Cu . . .	10	Cu . . .	S. W.	4	N. W.	3	N. W.	5
31	2	Cu St.	0	. . . . . .	0	. . . . . .	N. W.	3	N. W.	2	W . . .	1
Sum	. . . .	. . . . . .	. . . .	. . . . . .	. . . .	. . . . . .	. . . . . .	. . . .	. . . . . .	. . . .	. . . . . .	. . . .
M'n.	4	. . . . . .	6	. . . . . .	5	. . . . . .	. . . . . .	2	. . . . . .	2	. . . . . .	3
Av.	. . . .	. . . . . .	5	. . . . . .	. . . .	. . . . . .	. . . . . .	. . . .	. . . . . .	2	. . . . . .	. . . .

DECEMBER, 1870—continued.

BAROMETER HEIGHT REDUCED TO FREEZING POINT.				FORCE OF PRESSURE OF VAPOR IN INCHES.			RELATIVE HUMIDITY OR FRACTION OF SATURATION.			Day of Month.
7 A. M.	2 P. M.	9 P. M.	Mean.	7 A. M.	2 P. M.	9 P. M.	7 A. M.	2 P. M.	9 P. M.	
29.005	28.866	28.859	28.910	.175	.134	.121	89	50	58	1
28.908	28.916	28.949	28.924	.108	.099	.103	53	29	45	2
28.888	28.663	28,499	28.683	.100	.142	.169	57	51	65	3
28.662	28.679	28.644	28.661	.160	.173	.173	64	60	73	4
28.330	28.310	28.656	28.432	.212	.199	.170	82	90	80	5
28.906	28.822	28.674	28.800	.117	.170	.150	72	80	80	6
28.612	28.775	28.964	28.783	.143	.106	.100	79	58	79	7
29.062	28.968	28.911	28.980	.108	.135	.129	100	88	100	8
28.893	29.018	29.173	29.028	.123	.148	.129	100	89	88	9
29.184	29.164	29.113	29.157	.129	.155	.148	100	79	89	10
28.990	28.848	28.810	28.882	.162	.142	.168	89	70	89	11
28.797	28.798	28.838	28.811	.148	.162	.162	89	89	89	12
28.863	28.853	28.882	28.866	.162	.162	.135	89	80	88	13
28.987	29.112	29.271	29.123	.111	.117	.129	86	76	100	14
29.304	29.271	29.391	29.322	.090	.088	.113	100	62	100	15
29 301	29.251	29.117	29.223	.101	.130	.135	86	78	100	16
28.956	28.874	28.852	28.894	.117	.168	.153	87	89	100	17
28.842	28.734	28.753	28.776	.093	.123	.129	100	82	100	18
28.690	28.530	28.532	28.581	.108	.117	.141	100	87	100	19
28.747	28,754	28.850	28.783	.057	.062	.052	100	100	100	20
28.980	29.021	29.167	29.056	.046	.050	.040	100	100	100	21
29.187	29.131	29,134	29.150	.131	.040	.032	100	100	000	22
29.142	29.189	29.307	29.212	.023	.035	.031	100	100	100	23
29.337	29.273	29.264	29.291	.025	.040	.036	100	100	100	24
28.990	28.819	28.932	28.913	.055	.090	.057	100	100	100	25
29.135	29.163	29.069	29.122	.055	.057	.057	100	100	100	26
28.885	28.741	28.785	28.803	.075	.129	.141	100	88	100	27
28.905	28.975	29.015	28.965	.068	.075	.060	100	100	100	28
29.014	28.796	28.512	28.774	.044	.090	.094	100	100	100	29
28.141	28.180	28.470	28.297	.162	.118	.168	80	48	89	30
28.950	28.988	29.082	29.008	.141	.101	.129	100	51	88	31
......	....	....	....	......	......	......	....	....	....	Sum
......	....	....	28.910	.104	.114	.114	90	80	91	M'n
......	....	....	....	......	.110	......	....	87	....	Av

December 22—Lake Monona frozen over.
December 24—Lake Mendota frozen over.

JANUARY, 1871.

Day of Month.	Thermometer in the open air.				Rain and snow.			
	7 A. M.	2 P. M.	9 P. M.	Mean.	Time of beginning of rain or snow.	Time of ending of rain or snow.	Amount of rain or melted snow in guage, in inches.	Depth of snow in inches.
1	22	38	38	32.6				
2	15	20	16	17.0				
3	19	10	6	11.6				
4	5	19	28	17.3				
5	34	33	22	29.6				
6	7	14	8	9.6				
7	7	15	17	13.0	7 A. M.	6 P. M.	.20	2½
8	10	19	13	14.0				
9	15	26	27	22.6				
10	26	38	42	35.3				
11	43	46	48	45.6			*.03	
12	51	55	40	48.6	8½ P. M			
13	24	17	15	18.6		7 A. M	.34	
14	13	18	12	15.3	Night	7 P. M.	.35	3½
15	9	23	21	18.3				
16	14	23	14	17.0				
17	5	10	2	5.6				
18	−2	17	12	9.0				
19	13	25	24	20.6				
20	25	30	27	27.3				
21	25	26	18	23.0				
22	9	13	14	12.0	9½ A. M.			
23	16	19	15	16.6		12 M.	.80	8
24	12	16	5	11.0				
25	10	19	16	15.0				
26	15	21	10	15.3				
27	11	22	19	17.3				
28	7	30	19	18.6				
29	30	30	24	28.0	Night			
30	22	26	24	24.0				
31	22	27	17	22.0		11 A. M.	.60	6
Sum							2.32	20
M'n.				20.7				
Av.								

*Fog and mist.

JANUARY, 1871—continued.

CLOUDS.						WINDS.						
7 A. M.		2 P. M.		9 P. M.		7 A. M.		3 P. M.		9 P. M.		
Amount of cloudiness.	Kind of Clouds.	Amount of cloudiness.	Kind of Clouds.	Amount of cloudiness.	Kind of Clouds.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Day of Month.
1	St....	5	Cir-st.	8	Cir ...	S. W.	3	S	3	W ...	8	1
1	St....	0	.....	1	Cir ...	W ...	4	W ...	3	S. W.	8	2
4	St....	0	......	0	......	N. W.	3	N. W.	3	W ...	3	3
10	Cu	10	Cir-st.	10	Cu....	S. E..	2	S. E..	3	S. E..	2	4
10	Nim..	0	......	10	Cu....	S. E..	3	W ...	2	W ...	2	5
4	St....	3	Cu....	0	......	N. W.	3	N. W.	2	N. W.	1	6
10	Nim..	10	Nim..	10	Cu....	S. W.	3	S	3	......	0	7
5	St....	0	......	10	Cu....	W....	3	N. W.	2	W ...	1	8
10	Cu....	10	Cu....	10	Cu....	N. E..	2	S. E..	3	S. E..	4	9
0	......	10	Nim..	10	Cu....	S. E..	3	S.. .	1	S	8	10
10	Cu....	....	Fog...	10	Cu....	S.....	1	......	0	S. W.	2	11
9	Cu....	10	Cu....	10	Nim..	S.....	3	S	1	S. W.	2	12
10	Nim..	10	Cu....	10	Cu....	N. W.	2	N. W.	2	N. W.	3	13
10	Nim..	10	Nim..	10	Cu....	N. E..	4	N	4	N. E .	5	14
10	Cu....	8	Cu st.	0	......	N	4	N	2	N. W.	2	15
10	Cu..	5	Cu....	0	......	N	1	S. W .	1	......	0	16
2	Cir-st.	2	Cir ...	0	......	W....	2	N. W.	2	N. W.	2	17
1	St....	9	Cu....	0	......	N. W..	1	N. W.	1	S. W.	3	18
3	Cir-st.	10	Cu....	10	Nim..	S	3	S. W.	1	S	1	19
10	Cu....	9	Cu....	0	......	W....	2	S. W.	1	......	0	20
5	St....	1	Cir ...	0	......	S. W .	1	N. W.	3	N	1	21
10	Cir-st.	10	Nim..	10	Nim..	......	0	N. E .	2	E	2	22
10	Nim..	10	Cu....	0	... ..	N. E..	2	N. E .	2	......	0	23
10	Cu....	0	......	0	... ..	N. W.	3	N. W.	1	N. W.	1	24
10	Cu....	10	Cu....	10	Cu....	N. E..	2	N	2	W ...	2	25
10	Cu....	10	Cu....	0	......	N. E..	1	N. W.	1	......	0	26
10	St....	10	Cu....	10	Cu....	N	1	N. W.	1	W ...	2	27
1	St....	7	Cir cu.	10	Cu....	S. E ..	1	S. E..	1	S. W.	2	28
10	Cu....	10	Cu....	10	Cu....	S. W..	3	W....	1	N. W.	2	29
10	Cu....	10	Nim..	10	Nim..	N. E..	1	N	1	N. E .	1	30
10	Nim..	0	......	0	......	N	2	N. W.	2	W ...	1	31
....	......	....	......	....	......	......	....	......	....	......	....	Sum
7.4	......	6	......	6	......	......	2	......	2	......	2	M'n.
....	......	6.5	......	....	......	......	....	......	2	......	....	Av.

JANUARY, 1871—continued.

Day of Month.	BAROMETER HEIGHT REDUCED TO FREEZING POINT.				FORCE OF PRESSURE OF VAPOR IN INCHES.			RELATIVE HUMIDITY OR FRACTION OF SATURATION.		
	7 A. M.	2 P. M.	9 P. M.	Mean.	7 A. M.	2 P. M.	9 P. M.	7 A. M.	2 P. M.	9 P. M.
1	28.972	28.634	28.679	28.761	.059	.123	.130	40	54	58
2	29.057	29.207	29.115	29.126	.055	.059	.074	64	55	83
3	29.023	29.186	29.221	29.143	.103	.054	.057	100	78	100
4	29.022	28.691	28.430	28.714	.055	.103	.153	100	100	100
5	28.319	28.476	28.754	28.516	.138	.131	.084	71	70	71
6	29.012	29.129	29.169	29.070	.060	.082	.062	100	100	100
7	29.035	28.796	28.772	28.868	.060	.086	.094	100	100	100
8	28.976	29.190	28.279	29.148	.068	.071	.078	100	69	100
9	29.214	29.003	28.894	29.037	.086	.105	.129	100	75	88
10	28.732	28.797	28.546	28.691	.141	.229	.244	100	100	91
11	28.580	28.571	28.663	28.604	.261	.286	.310	96	92	92
12	28.801	28.821	28.903	28.842	.302	.310	.203	82	60	82
13	29.066	29.274	29.395	29.245	.111	.063	.070	86	67	82
14	29.396	29.208	29.141	29.248	.078	.098	.075	100	100	100
15	29.036	29.043	29.201	29.093	.065	.135	.113	100	100	100
16	29.283	29.238	29.173	29.231	.082	.123	.082	100	100	100
17	29.240	29.241	29.388	29.289	.055	.068	.048	100	100	100
18	29.440	29.351	29.274	29.355	.040	.094	.075	100	100	100
19	29.100	29.037	29.068	29.068	.078	.135	.129	100	100	100
20	29.072	29.156	29.156	29.128	.135	.136	.147	100	83	100
21	28.916	29.000	29.162	29.027	.117	.088	.098	87	62	100
22	29.142	28.997	28.862	29.000	.065	.078	.082	100	100	100
23	28.794	28.867	28.959	28.873	.090	.103	.086	100	100	100
24	29.122	29.206	29.346	29.224	.075	.090	.055	100	100	100
25	29.493	29.345	29.293	29.377	.068	.103	.090	100	100	100
26	29.176	29.091	29.063	29.143	.086	.096	.068	100	85	100
27	29.123	29.092	29.096	29.103	.071	.101	.103	100	86	100
28	28.922	28.700	28.765	28.796	.060	.148	.103	100	89	100
29	28.671	28.789	28.907	28.756	.167	.167	.129	100	100	100
30	28.850	28,751	28.715	28.772	.118	.123	.129	100	87	100
31	28.497	28.519	28.742	28.586	.118	.111	.094	100	75	100
Sum	....	....	....	....	......	......	......	....	....	...
M'n.	....	....	....	28.994	.099	.119	.109	94	86	95
Av.	....	....	....	....	......	.101	......	....	91	...

FEBRUARY, 1871.

THERMOMETER IN THE OPEN AIR.				RAIN AND SNOW.				
7 A. M.	2 P. M.	9 P. M.	Mean.	Time of beginning of rain or snow.	Time of ending of rain or snow.	Amount of rain or melted snow in guage, in inches.	Depth of snow in inches.	Day of Month.
10	36	31	25.6					1
4	9	13	8.6					2
28	41	34	34.3					3
25	35	21	27.0					4
18	18	12	16.0	*				5
6	20	20	15.3					6
23	28	25	25.3	*				7
20	28	19	22.3	4½ P.M.	Night....	.15	1½	8
2	16	4	7.3					9
—4	8	4	2.6					10
—3	11	15	7.6					11
14	21	18	17.6					12
4	19	13	12.0					13
9	28	24	20.3					14
32	39	33	34.6					15
20	37	30	29.0					16
30	33	20	27.6	7 A.M.	11 P.M.	.65	5	17
7	24	28	19.6					18
21	32	28	27.0					19
22	29	25	25.3	8 A.M.	2 P.M.	.10	1	20
19	32	21	24.0					21
16	34	34	28.0					22
37	46	46	43.0	Night....	Night....			23
44	42	32	39.3			.23		24
30	43	35	36.0	Night....				25
23	30	26	26.3		1 P.M.	.30	3	26
18	32	27	25.6					27
32	46	32	36.6					28
			23.7			1.43	10	Sum
								M'ns
								Av.

* Slight snow storm.

FEBRUARY, 1871—continued.

Day of Month.	CLOUDS.						WINDS.					
	7 A. M.		2 P. M.		9 P. M.		7 A. M.		2 P. M.		9 P. M.	
	Amount of cloudiness.	Kind of clouds.	Amount of cloudiness.	Kind of clouds.	Amount of cloudiness.	Kind of clouds.	Direction.	Force.	Direction.	Force.	Direction.	Force.
1	10	Cu....	5	Cir-cu.	10	Nim..	S.....	3	S.....	3	S. W.	3
2	0	......	0	......	5	Cu....	W....	3	W....	2	S	5
3	5	Cir...	0	......	0	......	S. W.	3	W....	1	W....	1
4	1	St....	0	......	10	St....	......	0	E....	1	E....	3
5	10	Cu-st.	10	Nim..	8	Cu-st.	N.E..	4	N.E..	4	N.E..	3
6	1	St....	10	Cu....	10	Cu....	N.E..	2	N.E..	1	N.E..	2
7	10	Cu....	10	Nim..	10	Cu....	E.....	2	S. E..	2	S.....	2
8	5	Cir...	10	Cu....	10	Nim..	S. W.	1	S. W.	1	N. W.	3
9	0	......	1	Cir...	0	......	W....	3	W....	2	W....	2
10	0	......	0	......	0	......	W....	1	W....	1	......	0
11	1	Cir...	10	Cir...	10	Cir...	......	0	......	0	N. ...	1
12	5	Cir...	1	Cu....	10	Cu....	N. ...	2	......	0	S.....	1
13	0	......	0	......	0	......	S. W.	2	S.....	1	S.....	2
14	0	......	6	Cir...	0	......	......	0	S.····	1	S.....	3
15	10	Cu....	10	Cu....	0	......	S.....	3	S.....	1	W....	3
16	....	Fog...	0	......	0	......	W....	1	S.....	2	......	0
17	10	Nim..	10	Nim..	10	Nim..	S. E..	1	N.E..	3	N. ...	5
18	0	......	10	Cu....	10	Cu....	N. W.	1	S.....	2	S.....	3
19	7	Cir...	10	Cu....	8	Cu....	......	0	......	0	......	0
20	10	Cu....	10	Nim..	5	Cir...	......	0	N. ...	1	N.E..	1
21	0	......	0	......	0	......	N. ...	1	E.....	1	......	0
22	0	......	8	Cir-cu.	10	Cu....	E.....	1	E.....	1	S. E..	3
23	10	Cu....	10	Cu....	10	Cu....	S. E..	2	S.....	2	S.....	4
24	8	Cu....	5	Cu....	0	......	S.....	2	W....	4	W....	3
25	0	......	0	......	10	Cu....	S.....	1	S. W.	1	S. W.	1
26	10	Nim..	8	Cu....	7	Cu....	N. ...	2	N. ...	2	N. ...	1
27	1	Cir...	1	Cu....	0	......	N. W.	1	N. W.	1	S. W.	2
28	3	Cir...	6	Cir...	7	Cu....	S.E...	3	S.W..	2	S. W.	5
Sum	....	......	....	......	....	......	......	....	......	....	......	....
M'ns	4	......	5	......	6	......	......	1	......	1	......	2
Av.	....	......	5	......	....	......	......	....	......	....	......	....

FEBRUARY 1871—continued.

BAROMETER HEIGHT REDUCED TO FREEZING POINT.				FORCE OR PRESSURE OF VAPOR, IN INCHES.			RELATIVE HUMIDITY OR FRACTION OF SATURATION.			Day of Month.
7 A. M.	2 P. M.	9 P. M.	Mean.	7 A. M.	2 P. M.	9 P. M.	7 A.M.	2 P. M.	9. P. M.	
28.783	28.676	28.759	28.747	.068	.115	.174	100	54	100	1
28.971	29.146	28.975	29.031	.052	.065	.078	100	100	100	2
28.726	28.791	28.926	28.811	.153	.126	.083	100	49	42	3
28.903	28.709	28.937	28.849	.135	.142	.113	88	70	100	4
28.916	28.934	29.045	28.965	098	.098	.075	100	100	100	5
29.150	29.132	29.148	29.143	.057	.108	.108	100	100	100	6
28.988	28.848	28.849	28.895	.123	.153	.135	100	100	100	7
28.855	28.737	28.726	28.776	.108	.135	.103	100	88	100	8
28.946	28.994	29.205	29.048	.048	.090	.052	100	100	100	9
29.372	29.383	29.396	29.384	.036	.062	.052	100	100	100	10
29.357	29.241	29.159	29.252	.038	.071	.086	100	100	100	11
28.981	28.960	28.976	28.972	.082	.113	.098	100	100	100	12
28.961	28.952	28.891	28.934	.052	.103	.078	100	100	100	13
28.852	28.825	28.715	28.797	.065	.153	.129	100	100	100	14
28.560	28.499	28.733	28.597	.181	.216	.150	100	91	80	15
28.938	28.940	28.907	28.928	.108	.136	.130	100	62	78	16
28.713	28.433	28.514	28.553	.148	.188	.108	89	100	100	17
28.731	28.730	28.626	28.696	.060	.129	.099	100	100	64	18
28.781	28.823	28.891	28.832	.113	.143	.153	100	79	100	19
28.962	28.938	28.999	28.963	.118	.142	.135	100	88	100	20
29.096	29.157	29.173	29.142	.103	.125	.113	100	69	100	21
29.099	28.943	28.778	28.940	.090	.120	.138	100	61	71	22
28.678	28.563	28.449	28.563	.221	.286	.311	100	92	100	23
28.104	28.444	28.872	28.440	·265	.155	.125	92	58	69	24
28.871	28.845	28.803	28.839	.148	.164	.142	89	59	70	25
28.680	28.608	28.676	28.654	.123	.130	.123	100	78	87	26
28.813	28.901	28.925	28.879	.098	.106	.129	100	58	88	27
28.580	28.456	28.536	28.524	.143	.176	.125	79	57	69	28
......	......	......	......	......	......	......	....	....	....	Sum
......	......	......	28.859	.108	.134	.119	92	82	88	M'n.
......	......	......	......	......	.120	......	....	87	....	Av.

MARCH, 1871.

Day of Month.	THERMOMETER IN THE OPEN AIR.				RAIN OR SNOW.			
	7 A. M.	2 P. M.	9 P. M.	Mean.	Time of beginning of rain or snow.	Time of ending of rain or snow.	Amount of rain or melted snow in gauge, in inches.	Depth of snow, in inches.
1	20	29	28	25.6	7 P. M..	....	....	....
2	20	30	28	29.0	....	Night ...	.75	....
3	21	32	25	26.0	....	....	....	....
4	34	43	37	38.0	....	....	....	....
5	32	40	32	34.6	2 P. M..	5 P. M..	.10	....
6	30	42	36	36.0	....	....	....	....
7	38	47	47	44.0	2 A. M..	....	....	....
8	48	60	50	52.6	....	10 P. M..	.76	....
9	33	30	32	31.6	....	....	....	....
10	32	42	36	36.6	....	....	....	....
11	30	40	33	34.3	....	....	....	....
12	30	38	32	33.3	8 A. M..	11 A. M..	.05	½
13	27	38	36	33.6	....	....	....	....
14	33	32	35	33.3	9½A.M..	8 P. M..	.98	....
15	35	44	46	41.6	....	....	....	....
16	40	39	33	37.3	....	....	....	....
17	28	44	42	38.0	....	....	....	....
18	37	39	35	37.0	....	....	....	....
19	30	32	31	31.0	....	....	....	....
20	36	32	30	32.6	....	....	....	....
21	28	34	30	30.6	....	....	....	....
22	23	32	27	27.3	....	....	....	....
23	27	32	32	30.3	....	....	....	....
24	28	39	36	34.3	....	....	....	....
25	34	47	40	40.3	Night ...	....	....	....
26	35	41	34	36 6	....	8 A. M..	.32	....
27	29	37	33	33.0	....	....	....	....
28	31	46	39	38.6	....	....	....	....
29	33	51	43	42.3	....	....	....	....
30	39	41	39	39.6	....	....	....	....
31	31	43	40	38.0	....	....	....	....
S 'm	......	......	......	......	....	....	2.96	....
M ns	......	......	......	35.4	....	....	....	....
Av .	......	......	......	......	....	....	....	....

MARCH, 1871—continued.

CLOUDS.						WINDS.						Day of Month.
7 A. M.		2 P. M.		9 P. M.		7 A. M.		2 P. M.		9 P. M.		
Amount of Cloudiness.	Kind of Clouds.	Amount of Cloudiness.	Kind of Clouds.	Amount of Cloudiness.	Kind of Clouds.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
0	......	10	Cu. ..	10	Nim..	W ...	3	......	0	E. ...	2	1
10	Cu. ..	10	Cu. ..	8	Cir. ..	N. E .	1	N	2	N. W.	2	2
1	Cu. ..	0	......	0	......	W ...	1	......	0	S. W.	1	3
8	Cir. ..	8	Cu. ..	0	......	S. W.	2	S. W.	1	S. W.	1	4
8	Cir-cu.	10	Nim..	0	......	......	0	S. W.	3	N. W.	3	5
4	Cir. ..	0	......	9	Cu. ..	N. W.	1	S. E..	2	S. E..	3	6
10	Nim..	10	Cu. ..	10	Cu. ..	S	2	S. E..	1	S. E..	1	7
10	Cu. ..	10	Cu. ..	10	Nim..	S. E..	1	S. E..	1	......	0	8
10	Cu. ..	10	Cu. ..	10	Cu. ..	S	4	S. W.	4	S. W.	3	9
1	Cu. ..	0	......	0	......	S. W.	3	W. ..	4	......	0	10
0	......	0	......	0	......	......	0	W. ..	1	W. ..	1	11
2	Cu. ..	8	Cu. ..	0	......	W. ..	1	S. W.	2	S. W.	2	12
0	......	2	Cu. ..	4	Cu. ..	......	0	......	0	......	0	13
9	Nim..	10	Nim..	10	Nim..	E	4	E	3	E	2	14
10	Cu. ..	10	Cu. ..	10	Cu. ..	E	1	......	0	E	2	15
10	Cu. ..	8	Cu. ..	10	Cu. ..	W. ..	1	W. ..	1	W. ..	2	16
5	Cu. ..	0	......	8	Cu. ..	W. ..	3	W. ..	1	S	1	17
6	Cu. ..	5	Cu. ..	0	......	N. W.	2	N. W.	1	N. W.	2	18
9	Cu. ..	10	Cu. ..	10	Cu. ..	N. E .	3	E	3	E	3	19
10	Cu. ..	9	Cu. ..	10	Cu. ..	S. E..	2	W. ..	4	W. ..	5	20
6	Cu. ..	3	......	0	......	W. ..	3	W. ..	1	......	0	21
3	Cn. ..	10	Cu. ..	10	Cu. ..	N. E .	3	N. E .	3	N ...	2	22
10	Cu. ..	10	Cu. ..	9	Cu. ..	N. W.	2	N. W.	2	N. W.	1	23
0	......	0	......	1	St....	N. W.	1	......	0	N. E .	1	24
10	Cir-st.	9	Cir. ..	5	Cir-st.	E	1	S. E..	2	S. E..	1	25
10	Nim..	10	Cu. ..	10	Cu. ..	......	0	......	0	N. W.	3	26
5	Cir-cu.	8	Cu. ..	1	Cir. ..	N. W.	2	N. W.	1	N	1	27
0	......	0	......	0	......	......	0	S	1	......	0	28
10	Cir-cu.	5	Cir. ..	10	Cu. ..	S	1	S	1	S	1	29
10	Cu. ..	10	Cir-cu.	8	Cu. ..	S. W.	1	N. E .	2	N. E .	2	30
1	Cir-st.	1	Cu. ..	0	.....	N. E .	2	N. E .	2	......	0	31
....	......	....	......	....	......	......	....	......	....	......	....	S 'm
6	.....	6	... ..	6	......	......	1.6	......	1.6	.....	1.5	Mns
....	......	6	......	....	......	......	....	......	....	......	....	Av .

MARCH, 1871—continued.

Day of Month.	BAROMETER HEIGHT REDUCED TO FREEZING POINT.				FORCE OR PRESSURE OF VAPOR, IN INCHES.			RELATIVE HUMIDITY OR FRACTION OF SATURATION.		
	7 A. M.	2 P. M.	9 P. M.	Mean.	7 A. M.	2 P. M.	9 P. M.	7 A. M.	2 P. M.	9 P. M.
1	28.814	28.882	28.831	28.832	.108	.142	.153	100	88	100
2	28.616	28.622	28.773	28.670	.142	.136	.135	88	83	88
3	28.860	28.915	28.919	28.894	.113	.106	.117	100	58	87
4	28.800	28.798	28.885	28.828	.118	.142	.178	68	51	81
5	28.916	28.833	28.955	28.901	.143	.182	.143	79	73	79
6	29.064	29.065	28.856	28.955	.130	.139	.149	78	56	71
7	28.591	28.490	28.497	28.526	.229	.273	.305	100	85	96
8	28.375	28.244	28.138	28.252	.335	.518	.361	100	100	100
9	28.138	28.270	28.497	28.301	.131	.130	.143	70	78	79
10	28.677	28.781	28.881	28.779	.143	.113	.149	79	42	71
11	28.911	28.870	28.863	28.881	.167	.097	.131	100	39	70
12	28.826	28.792	28.798	28.805	.130	.123	.143	78	54	79
13	28.868	28.896	28.908	28.891	.129	.103	.129	88	45	61
14	28.797	28.692	28.673	28.721	.131	.162	.162	70	89	80
15	28.636	28.668	28.538	28.614	.204	.108	.286	100	37	92
16	28 08	28.602	28.671	28.627	.203	.238	.168	82	100	89
17	28.821	28.867	28.872	28.853	.117	.151	.177	76	52	66
18	28.916	29.002	29.028	28.982	.157	.173	.142	71	73	70
19	29.043	28.874	28.667	28.861	.130	.143	.155	78	79	89
20	28.458	28.653	28.692	28.601	.191	.125	.111	90	69	67
21	28.739	28.744	28.803	28.762	.135	.155	.111	88	79	67
22	28.836	28.656	28.887	28.793	.106	.125	.181	86	69	100
23	28.887	28.997	29.108	28.964	.147	.125	.106	100	69	58
24	29.205	29.210	29.167	29.194	.117	.110	.149	76	46	71
25	29.140	29.032	28.960	29.044	.155	.179	.188	79	55	77
26	28.844	28.724	28.804	28.790	.183	.212	.155	90	82	79
27	28.867	28.882	28.949	28.899	.123	.157	.150	77	71	80
28	29.079	29.055	28.994	29.042	.136	.152	.173	78	50	73
29	28.932	28.904	28.939	28.925	.150	.173	.120	80	46	36
30	28.992	29.039	29.076	29.035	.173	.169	.152	73	65	63
31	29.103	29.011	28.915	29.009	.136	.130	.182	78	45	73
S 'm	....	....	....	....	....	....	....	....	....	...
Mns	....	....	....	28.814	.152	.168	.164	85	65	74
Av.	....	....	....	....	......	.161	......	....	75	...

March 2, 2 A. M.—Heavy thunder and lightning, accompanied by sleet and hail.

APRIL, 1871.

THERMOMETER IN THE OPEN AIR.				RAIN OR SNOW.				
7 A. M.	2 P. M.	9 P. M.	Mean.	Time of beginning of rain or snow.	Time of ending of rain or snow.	Amount of rain or melted snow in guage, in inches.	Depth of snow, in inches.	Day of Month.
34	35	47	38.6					1
41	61	48	50.0	4½ P. M.	Night....	.12		2
44	55	53	50.6					3
51	68	60	59.6					4
38	56	43	45.7					5
39	76	69	61.3					6
63	82	70	71.6					7
61	75	51	62.3					8
35	51	40	42.0	Night....				9
33	33	35	33.6		Night....	1.00		10
33	35	35	34.3					11
38	53	46	35.6					12
39	55	48	47.3					13
38	50	40	42.6					14
34	46	40	40.0					15
35	46	40	40.3	Night....	Night....	.05		16
39	58	44	47.0	4 P. M..	8 P. M.	.15		17
45	65	62	57.3	Night....	Night....	.28		18
59	50	45	51.3	10½ A. M.				19
36	42	41	39.6					10
36	39	39	38.0		7 P. M...	.16		21
36	52	45	44.3					22
45	61	51	52.3					23
50	68	56	58.0					24
47	50	47	48.0					25
45	55	56	52.0	11 A. M..	Night....	.21		26
54	51	47	50.6					27
45	45	45	46.0	12 M. ...	Night....	.03		28
44	54	55	51.0					29
48	56	51	51.6					30
						2.00		S'm.
			46.0					M'n.
								Av..

APRIL, 1871—continued.

Day of Month.	CLOUDS.						WINDS.					
	7 A. M.		2 P. M.		9 P. M.		7 A. M.		2 P. M.		9 P. M.	
	Amount of Cloudiness.	Kind of Clouds.	Amount of Cloudiness.	Kind of Clouds.	Amount of Cloudiness.	Kind of Clouds.	Direction.	Force.	Direction.	Force.	Direction.	Force.
1	5	Cir. . .	0	......	5	Cir. . .	S W. .	3	S W. .	3	S W. .	2
2	7	Cu-st.	4	Cir-cu.	10	Cu . . .	S W.	1	......	0	S W. .	1
3	0	......	0	......	0	......	N W-.	3	N W .	3	W . . .	2
4	5	Cir. . .	2	Cir. . .	1	Cu . . .	S W. .	1	......	0	N W. .	1
5	0	......	5	Cir. . .	0	......	N E . .	2	E	1	E	1
6	1	Cir. . .	2	Cir. . .	1	Cir. . .	E	1	S E . .	1	......	0
7	10	Cu-s	2	Cir. . .	2	St. . . .	S	3	S . . .	4	S	4
8	10	Cir-st.	0	......	0	......	S	1	S	5	S W. .	5
9	0	......	1	Cir. . .	9	Cir-st .	S W. .	4	S W. .	3	N	3
10	10	Nim. .	10	Nim.	10	Nim. .	E	2	N E . .	3	......	0
11	10	Cu . . .	10	Cu. . . .	1	St . . .	S W. .	3	W . . .	4	W . . .	3
12	1	Cu-st.	5	r- cu	3	Cu . . .	S W. .	2	S W. .	3	N W.	3
13	0	......	0	. . . .	0	......	N W. .	3	W . . .	2	......	0
14	6	Cir-cu.	1	Cu . . .	0	......	N E. .	1	N E . .	1	N E . .	1
15	0	......	6	Cir. . .	1	St. . . .	N E. .	1	......	0	S E . .	3
16	10	Cu-st.	10	Cu-st .	4	St. . . .	S E . .	2	S E. . .	1	S E . .	1
17	10	Cir-st.	7	Cu . . .	10	Cu . . .	E	1	E	2	E	2
18	10	Cu . . .	0	. . . . .	9	Cu . . .	E	2	E	3	E	3
19	3	Cu. . . .	10	Cu . . .	10	Nim. .	S	4	S	5	S E . .	5
20	10	Nim. .	10	Nim. .	10	Nim. .	S	4	S E . .	3	S W. .	3
21	10	Nim. .	10	Nim. .	10	Cu . . .	N W. .	3	N W .	3	N	4
22	0	......	1	Cu . . .	0	......	N W. .	3	N W .	3	W . . .	2
23	5	Cir. . .	2	Cir. . .	0	......	S	1	S	2	S	2
24	5	Cu-st.	0	. . . . .	8	Cir. . .	S	2	S	3	N	2
25	10	Cu . . .	10	Cir-st.	6	Cir-st.	N E. .	2	N E . .	2	......	0
26	10	Cir-st.	10	Nim. .	10	Cu . . .	N E. .	1	E	1	S E . .	1
27	8	Cu-st.	10	Cu . . .	10	Cu . . .	S	2	S W. .	4	W . . .	4
28	9	Cir-st .	10	Nim. .	10	Nim. .	S W. .	4	S W. .	4	W . . .	3
29	3	Cir-st.	9	Cir-cu.	10	Cir-cu	W . . .	3	......	0	......	0
30	10	Cir-st.	10	Cu. . .	10	Cu . . .	......	......	......	0	N E. .	2
S'm.	....	......	....	......	....	......	......	....	......	....	......	....
M's.	6	......	5	......	5	......	......	2	......	2	......	2
Av .	....	......	5	......	....	......	......	....	......	2	......	....

APRIL, 1871—continued.

BAROMETER HEIGHT REDUCED TO FREEZING POINT.				FORCE OR PRESSURE OF VAPOR, IN INCHES.			RELATIUE HUMIDITY OR FRACTION OF SATURATION.			Day of Month
7 A. M.	9 P. M.	2 P. M.	Mean.	7 A. M.	2 P. M.	9 P. M.		3 P. M.	9 P. M.	
28.805	28.573	28.498	28.625	.138	.103	.179	71	24	55	1
28.465	28.295	28.310	28.356	.169	.164	.260	65	30	78	2
28.635	28.778	28.833	28.748	.173	.127	.269	60	30	67	3
28.783	28.777	28.842	28.800	.196	.204	.255	52	30	49	4
28.918	28.791	28.771	28.826	.103	.204	.164	45	45	59	5
28.688	28.594	28.531	28.604	.195	.395	.367	82	43	52	6
28.507	28.412	28.523	28.480	.386	.425	.385	67	39	53	7
28.579	28.422	28.643	28.548	.354	.287	.186	66	33	51	8
28.847	28.888	28.979	28.904	.127	.126	.049	62	34	20	9
28.857	28.547	28.291	28.565	.150	.168	.204	80	89	100	10
28.250	28.415	18.579	28.414	.168	.133	.127	89	66	62	11
28.665	28.666	28.664	28.665	.144	.194	.169	63	48	54	12
28.819	28.746	28.813	28.793	.173	.144	.165	73	33	49	13
28.751	28.763	28.784	28.766	.123	.162	.225	54	45	91	14
28.895	28.859	28.873	28.875	.155	.169	.139	79	54	56	15
28.948	28.948	28.990	28.962	.162	.215	.182	80	69	73	16
28.967	28.859	28.838	28.888	.195	.309	.241	82	64	84	17
28.648	28.467	28.384	28.499	.251	.383	.399	84	61	72	18
28.071	28.152	28.225	28.149	.323	.210	.228	65	58	76	19
28.208	28.299	28.438	28.315	.191	.199	.257	90	74	100	20
28.589	28.765	28.900	28.757	.191	.173	.142	90	73	70	21
28.974	29.004	29.089	29.022	.115	.113	.138	54	29	46	22
29.168	29.123	29.129	29.169	.160	.164	.173	53	30	46	23
29.145	29.013	28.981	29.046	.186	.232	.282	51	34	63	24
28.988	29.005	28.948	28.984	.273	.162	.179	85	45	55	25
28.781	28.641	28.662	28.695	.228	.376	.391	76	87	87	26
28.334	28.345	28.583	28.421	.362	.296	.202	87	79	62	27
28.543	28.486	28.470	28.500	.182	.228	.204	61	76	68	28
28.670	28.639	28.646	28.651	.173	.256	.295	60	61	68	39
28.701	28.710	28.784	28.732	.286	.282	.296	92	63	79	30
......	......	......	......	......	......	......	....	....	....	S'm.
......	......	......	28.692	.202	.220	.225	71	51	62	M's.
......	......	......	......	......	.215	......	....	61	....	Av.

April 1—Lake Monona free from ice.
April 2—Lake Mendota free from ice.
Brilliant Aurora, evening of 9th.
April 30—Plum and cherry trees beginning to bloom.

MAY, 1871.

Day of Month.	THERMOMETER IN THE OPEN AIR.				RAIN OR SNOW.			
	7 A. M.	2 P. M.	9 P. M.	Mean.	Time of beginning of rain or snow.	Time of ending of rain or snow.	Amount of rain or melted snow in guage, in inches.	Depth of snow, in inches.
1	50	60	50	53.3				
2	48	50	47	48.3	4 A. M..	11 P. M..	1.82	
3	47	48	41	45.3	8 A. M..			
4	39	40	38	39.3		7 P. M..	.07	
5	38	45	46	43.0				
6	44	57	54	51.6				
7	51	60	50	53.6				
8	44	56	48	49.3				
9	41	50	47	46.0				
10	45	60	56	53.6				
11	54	70	64	62.6				
12	59	74	69	67.3				
13	56	78	65	66.3				
14	52	69	56	59.0				
15	50	70	64	61.3	Night ...			
16	61	74	64	66.3		7 A. M..	.11	
17	42	62	52	52.0				
18	50	73	64	65.6				
19	66	83	74	74.3				
20	70	70	66	68.6	10½A.M..	Night ...	.52	
21	63	70	61	64.6				
22	58	69	55	60.6				
23	56	75	62	64.3				
24	60	78	67	68.3	9½P. M..			
25	68	67	64	66.3		7 P. M..	.24	
26	63	74	70	69.6				
27	68	81	75	74.6	9½P. M..	Night ...	.55	
28	74	84	74	77.3				
29	73	81	69	74.3				
30	71	80	73	74.6				
32	73	86	78	79.0				
S 'm							3.31	
M'n.				61..				
Av.								

MAY, 1871—continued.

CLOUDS.						WINDS.						
7 A. M.		2 P. M.		9 P. M.		7 A. M.		2 P. M.		9 P. M.		
Amount of cloudiness.	Kind of clouds.	Amount of cloudiness.	Kind of clouds.	Amount of cloudiness.	Kind of clouds.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Day of Month.
0	......	5	Cu ...	8	Cir-st.	......	0	E....	1	E....	3	1
10	Nim..	10	Cu ...	10	Nim..	S. E..	2	E....	3	E....	3	2
10	Cu-st.	10	Cu ...	10	Cu ...	N.E..	3	N.E..	4	N. E.	4	3
10	Nim..	10	Nim..	10	Cu ...	N.E..	4	N.E..	4	N....	4	4
10	Cu ...	10	Cu ...	10	Cu-st .	N.W.	4	N.W.	3	N....	3	5
0	......	0	......	0	......	N.W.	3	......	0	......	0	6
0	......	0	......	7	Cu-st .	......	0	E....	1	S.E..	1	7
0	......	1	Cu ...	0	......	E....	2	E....	1	S.E..	1	8
0	......	4	Cu ...	0	......	N.E..	3	N.E..	4	......	0	9
0	......	0	......	0	......	N.W.	1	......	0	......	0	10
0	......	0	......	0	......	......	0	......	0	......	0	11
0	......	1	Cir ...	0	......	......	0	......	0	......	0	12
0	......	0	......	1	St....	N.E..	2	E....	1	S.E..	1	13
7	Cu ...	1	Cu ...	0	......	......	0	N.W.	1	......	0	14
0	......	0	Cu ...	2	St....	N.E..	2	......	0	S. W.	2	15
10	Nim..	8	......	0	......	S .W.	2	W ...	1	N....	2	16
3	Cir ...	0	......	1	St....	N.E..	3	N.E..	1	......	0	17
1	Cir ...	1	Cir ...	1	St....	S. E..	2	S.E..	3	S	2	18
1	Cir ...	1	Cu ...	1	St....	S	3	S	3	S	1	19
4	Cu ...	10	Cu ...	10	Cu ...	S.E..	1	......	0	......	0	20
10	Cu ...	3	Cu ...	0	......	N.E..	2	S. W.	1	N.W.	1	21
0	......	0	......	1	S .	S. W.	1	N. W.	1	S. E..	4	22
2	Cu ...	3	Cr ...	0	.... .	N E. .	2	S. E..	4	S. E..	3	23
0	......	4	Cir ...	10	Cu . .	S. E..	1	S	2	....	4	24
8	Cir cu	10	Nim..	7	Cir-st .	S. W.	2	W ...	2	......	0	25
3	Cu-st.	7	Cir ...	4	Cir-cu.	......	0	......	0	......	0	26
5	Cu-st .	4	Cu ...	6	Cu ...	......	0	S. W.	1	S. W.	2	27
2	Cir ...	1	Cu ...	1	Cir ...	S	1	S	1	S	1	28
2	Cir ...	2	Cu ...	5	Cir-cu	S	1	S	1	S. E..	1	29
1	Cu ...	2	Cu ...	0	......	S. E..	1	S. E..	1	......	0	30
0	......	2	Cu ...	1	St....	S. E..	1	S. E..	1	S. E..	1	31
....	......	....	......	....	......	......	....	......	....	....	...	S 'm
3	......	4	......	3	......	......	....	......	....	......	...	Mns
....	......	3	......	....	......	......	....	......	....	......	....	Av.

MAY, 1871—continued.

Day of Month.	BAROMETER HEIGHT REDUCED TO FREEZING POINT.				FORCE OF PRESSURE OF VAPOR, IN INCHES.			RELATIVE HUMIDITY OR FRACTION OF SATURATION.		
	7 A. M.	2 P. M.	9 P. M.	Mean.	7 A. M.	2 P. M.	9 P. M.	7 A. M.	2 P. M.	9 P. M.
1	28.842	28.826	28.835	28.834	.258	.283	.258	71	54	71
2	28.806	28.761	28.759	28.775	.260	.283	.323	78	78	100
3	28.734	28.746	28.811	28.763	.249	.242	.212	77	74	82
4	28.781	28.783	28.836	28.800	.195	.182	.165	82	73	72
5	28.823	28.871	28.930	28.874	.165	.138	.169	72	46	54
6	28.951	28.972	28.920	28.947	.151	.118	.133	52	25	22
7	28.894	28.874	28.876	28.881	.245	.216	.186	65	40	51
8	28.954	28.952	28.948	28.951	.151	.155	.189	52	34	56
9	29.080	29.119	29.175	29.125	.147	.139	.156	57	39	48
10	29.211	29.140	29.030	29.127	.160	.127	.204	53	25	45
11	29.007	28.916	28.872	28.932	.231	.206	.285	55	28	48
12	28.882	28.848	28.862	28.864	.269	.240	.277	54	28	39
13	28.969	28.854	28.867	28.897	.159	.306	.230	41	43	51
14	29.012	28.997	29.015	29.008	.155	.310	.359	34	32	58
15	28.916	28.879	28.801	28.865	.258	.323	.373	71	44	62
16	28.730	28.680	28.796	28.735	.442	.396	.433	83	48	73
17	29.022	29.055	29.047	29.041	.169	.284	.257	54	51	66
18	29.076	29.049	28.905	29.043	.210	.283	.464	58	35	77
19	28.883	28.844	28.861	28.862	.316	.520	.604	49	46	73
20	28.892	28.862	28.835	28.863	.551	.621	.536	75	85	84
21	28.852	28.902	28.936	28.897	.478	.416	.325	83	57	61
22	29.005	28.984	29.009	28.999	.337	.277	.295	70	39	68
23	29.029	28.942	28.956	28.990	.282	.484	.340	63	56	61
24	28.982	28.936	28.879	28.939	.365	.478	.522	76	50	79
25	28 861	28.959	28.992	28.937	.612	.591	.529	90	89	89
26	29.053	29.070	29.057	29.060	.510	.529	.551	88	89	75
27	29.053	28.977	28.920	28.983	.577	.624	.666	85	59	77
28	28.956	28.892	28.882	28.910	.680	.623	.604	81	53	73
29	28.898	28.823	28.789	28.836	.617	.682	.599	77	90	85
30	28.844	28.852	28.864	28.853	.608	.638	.644	80	62	86
31	28.904	28.908	28.888	28.900	.655	.677	.704	81	54	73
S 'm	....	....	....	....	......	......	......	....	....	...
Mns	....	....	....	28.909	.337	.367	.373	68	52	63
Av .	....	....	....	....	......	.359	......	....	61	...

May 10th—Frost in the morning.

JUNE, 1871.

THERMOMETER IN THE OPEN AIR.				RAIN OR SNOW.				
7 A. M.	2 P. M.	9 P. M.	Mean.	Time of beginning of rain or snow.	Time of ending of rain or snow.	Amount of rain or melted snow in gauge, in inches.	Depth of snow, in inches.	Day of Month.
75	89	72	78.6					1
71	82	72	75.0					2
74	85	72	77.0					3
71	86	71	76.0	3 P. M.	4½ P.M.	.29		4
75	84	73	77.3	Night.				5
68	78	69	71.6		7½ A.M.	.54		6
64	72	62	66.0					7
56	61	57	58.0					8
57	70	64	63.3	6½ P.M.	Night.	.91		9
67	71	62	66.6					10
67	70	62	66.3					11
59	71	66	65.3					12
66	73	68	69.0					13
62	70	64	65.3					14
59	69	60	62.6					15
53	73	62	62.3	11 P. M.				16
59	68	65	64.0		Night.	.19		17
60	82	75	71.6					18
72	82	75	76.5	In night.		1.17		19
63	73	70	65.3					20
66	69	63	66.0	In night.		.40		21
59	76	71	65.3	Night.				22
59	65	59	61.0					23
58	67	61	62.0		8 A. M.	1.43		24
64	74	66	68.0					25
68	77	74	73.0					26
69	77	70	72.0					27
62	63	62	62.3					28
55	67	57	69.6					29
54	72	66	64.0					30
						4.93		Sum
			69.3					M'n.
								Av.

JUNE, 1871—continued.

	CLOUDS.						WINDS.					
	7 A. M.		2 P. M.		9 P. M.		7 A. M.		2 P. M.		9 P. M.	
Day of Month.	Amount of cloudiness.	Kind of clouds	Amount of cloudiness.	Kind of clouds	Amount of cloudiness.	Kind of clouds	Direction.	Force.	Direction.	Force.	Direction.	Force.
1	2	Cu ...	3	Cu ...	9	Cu-st .	S. E..	1	S. E..	1	N. E..	1
2	0	......	1	Cu ...	0	......	N. W.	1	N. E..	1	S. E..	1
3	0	......	4	Cu ...	5	Cir-cu.	S. E..	1	S	1	S	2
4	4	Cir-cu.	8	Cu ...	0	......	S. E..	1	S. E..	1	......	0
5	0	......	5	Cir-cu.	4	Cu ...	S. W .	1	S. E..	2	......	0
6	10	Nim..	3	Cu ...	0	......	N. E .	1	W ...	3	W ...	3
7	0	......	2	Cu ...	1	Cu ...	W ...	3	W ...	3	W ...	3
8	6	Cu-st.	2	Cu ...	0	......	N	3	N. W.	2	E. ...	3
9	3	Cu-st.	4	Cu ...	10	Nim..	S. E..	3	S. E..	2	S	3
10	0	......	0	......	0	......	S. W.	2	W ...	2	W ...	3
11	4	Cu-cir.	5	Cu ...	0	......	W ...	2	N. W.	2	N. W.	2
12	0	......	0	......	1	St....	W ...	2	W ...	2	S. W.	4
13	0	......	4	Cu ...	0	......	N. W.	2	N. W.	3	N. W.	1
14	1	Cu-cir.	1	Cu ...	1	Cu-st.	W ...	2	N. W.	4	N. W.	1
15	0	......	2	Cu-cir.	1	St....	......	0	N	1	E.....	3
16	4	Cu-cir.	2	Cu-cir.	10	Cu ...	W ...	2	S. E..	2	S. E..	2
17	10	Cu ...	9	Cu ...	1	St....	S. E..	2	N. E .	2	N. E..	2
18	*	......	1	Cu ...	4	Cir. ..	S. E..	1	S	1	S	1
19	2	Cir-st.	1	Cir. ..	1	Cir-st.	N. W.	1	N. W.	1	N. W.	1
20	3	Cir-cu.	0	......	1	Cir-st.	N	2	N	2	N. E..	1
21	1	Cir ...	10	Cu-cir.	10	Cu-st.	S. E..	2	S. E..	1	S. E..	2
22	10	Cu-st .	5	Cu ...	8	Cu-st.	S. E..	1	S. E..	1	S. E..	3
23	10	Nim..	10	Nim..	10	Nim..	E	3	S. E..	2	N....	4
24	10	Nim..	6	Cu ...	0	......	N .. .	2	N. E .	3	N. E..	2
25	1	Cu ...	9	Cu ...	9	Cu ...	N. E..	1	N. E..	2	E.....	2
26	7	Cir-cu.	5	Cu ...	1	Cu ...	S. E..	1	S	1	S	1
27	0	......	3	Cir. ..	2	Cir. ..	W ...	4	W ...	5	W ...	4
28	2	Cir ...	4	Cu. ..	4	Cu ...	N	5	N	5	N.....	1
29	1	St....	3	Cu ...	2	Cu ...	E	1	E	2	S. E..	3
30	10	Cu ...	2	Cu-cir.	8	Cir-st.	S.....	3	S	3	S	4
Sum	....	......	....	......	....	......	......	....	......	....	......	....
M'n.	3	......	3	......	3	......	......	2	......	2	......	2
Av.	....	......	3	......	....	......	......	....	......	2	......	....

* Fog.

JUNE, 1871—continued.

BAROMETER HEIGHT REDUCED TO FREEZING POINT.				FORCE OF PRESSURE OF VAPOR IN INCHES.			RELATIVE HUMIDITY OR FRACTION OF SATURATION.			
7 A. M.	2 P. M.	9 P. M.	Mean.	7 A. M.	2 P. M.	9 P. M.	7 A. M.	2 P. M.	9 P. M.	Day of Month.
28.921	28.869	28.879	28.889	.628	.809	.631	73	59	81	1
28.915	28.864	28.883	28.887	.608	.650	.595	80	59	76	2
28.880	28.855	28,897	28.844	.680	.733	.595	81	61	76	3
28.933	28.896	28.893	28.907	.608	.805	.608	80	65	80	4
28.979	28.860	28.815	28.884	.666	.746	.617	77	64	77	5
28.758	28.707	28.631	28.699	.612	.514	.462	90	54	65	6
28.779	28.769	28.814	28.787	.373	.358	.429	62	46	77	7
28.930	28.996	29.034	28.987	.336	.297	.378	75	55	81	8
29.107	28.926	28.804	28.909	.322	.416	.464	69	57	77	9
28.877	28.894	28.868	28.880	.489	.371	.429	75	49	77	10
28.802	28.748	28.782	28.777	.393	.385	.282	59	53	51	11
28.840	28.798	28.812	28.816	.269	.250	.346	54	33	54	12
28.750	28.804	28.850	28.801	.316	.409	.290	49	50	42	13
28.926	28.934	28.986	28.949	.257	.263	.285	43	36	48	14
29.056	29.022	29.014	29.031	.296	.277	.388	59	39	65	15
29 026	28.956	28.884	28.955	.295	.376	.284	73	47	51	16
28.761	28.772	28.820	28.784	.439	.476	.483	68	69	78	17
28.900	28.850	28.793	28.847	.456	.610	.666	88	56	77	18
28.787	28.850	28.902	28.846	.595	.497	.484	76	45	56	19
28.898	28,991	29.118	29.003	.356	.253	.385	62	31	53	20
29.141	29.047	28.989	29.059	.285	.398	.386	45	56	67	21
28.933	28.885	28.858	28.892	.380	.541	.608	76	60	80	22
28.847	28.694	28.686	28.742	.439	.549	.439	88	89	88	23
28.807	28.867	28.950	28.874	.394	.425	.325	82	64	61	24
29.024	29.017	29.006	29.016	.373	.497	.496	62	59	77	25
29.035	29.048	28.982	29.022	.476	.639	.718	69	69	86	26
28.981	29.519	28.860	29.120	.430	.323	.385	61	35	53	27
28.892	28.945	28.970	28.935	.312	.270	.284	56	47	51	28
29.058	28.997	28.959	29.005	.295	.274	.322	68	41	69	29
28.954	28.861	28.799	28.871	.206	.327	.316	49	42	49	30
......	......	......	......	......	......	......	....	....	....	Sum
......	......	......	28.900	.524	.490	.446	68	53	67	M'n
......	......	......	......	......	.486	......	....	62	....	Av.

	S.	S.W.	W.	N.W.	N.	N.E.	E.	S.E.
Percentage of Winds—	11	4	24	11	13	9	8	20.

Rain-fall, 4.93 inches.
Evaporation, 5.43 inches.

JULY, 1871.

Day of Month.	THERMOMETER IN THE OPEN AIR. 7 A. M.	2 P. M.	9 P. M.	Mean.	RAIN OR SNOW. Time of beginning of rain or snow.	Time of ending of rain or snow.	Amount of rain or melted snow in guage, in inches.	Depth of snow in inches.
1	68	73	65	68.6				
2	65	79	70	71.3				
3	65	76	64	68.0	3:40 P. M	5 P. M.	.25	
4	62	78	67	60.0				
5	70	80	71	73.6	11 P. M.	Night	1.56	
6	67	75	68	70.0				
7	68	78	74	73.3				
8	74	90	83	82.3	Night		.07	
9	74	77	74	75.0				
10	65	69	65	66.3				
11	64	84	73	73.6				
12	76	89	73	79.3				
13	74	82	76	77.3				
14	70	78	72	73.3				
15	71	89	77	79.0	9 P. M	Slight		
16	75	82	69	75.3				
17	68	77	70	71.6				
18	68	77	68	71.0	Night		.04	
19	56	64	61	60.3			.12	
20	59	68	59	62.0	5¼ P. M	5:50 P. M.		
21	57	67	64	62.6				
22	61	70	64	65.0				
23	64	76	62	67.3				
24	61	76	70	69.0				
25	71	83	74	65.6				
26	73	80	73	75.3				
27	67	75	67	69.6				
28	63	75	65	67.3				
29	63	80	73	72.0				
30	76	85	67	76.0	6 P. M	6½ P. M.	.07	
31	65	82	75	74.0	7 A. M.	Slight		
Sum							2.11	
M'n.				71.1				
Av.								

JULY, 1871—continued.

CLOUDS.						WINDS.						
7 A. M.		2 P. M.		9 P. M.		7 A. M.		3 P. M.		9 P. M.		Day of Month.
Amount of cloudiness.	Kind of Clouds.	Amount of cloudiness.	Kind of Clouds.	Amount of cloudiness.	Kind of Clouds.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
8	Cir cu.	8	Cu-st.	10	Cu....	S. W.	3	W ...	3	S. W.	3	1
10	Cir-st.	3	Cu-cir	0	......	S. W.	1	W ...	4	W ...	0	2
4	Cir-st.	9	Cu-st.	9	Cu-st.	W ...	2	W ...	3	N. W.	3	3
0	......	2	Cu....	3	Cu....	W ...	3	W ...	3	W ...	3	4
2	Cu st.	6	Cu....	10	Cu....	S. W..	4	S	4	S	3	5
9	Cu....	5	Cu....	1	Cu....	S. W.	3	W ...	5	W ...	2	6
0	......	5	Cir-cu	10	Cu-st.	W ...	2	W ...	1	S. W.	0	7
5	Cu-cir	4	Cir-cu	4	Cu....	S	3	S	3	S. W.	2	8
6	Cu....	3	Cu-st.	1	Cu....	W ...	2	N	2	N. W.	1	9
8	Cu-st .	10	Cu-st.	1	St....	S. E..	1	S. E..	2	E	1	10
Fog.	......	1	Cu....	0	......	S. E..	2	W ...	3	W ...	2	11
1	St....	1	Cu....	0	......	W ...	2	S. W.	3	S	3	12
6	Cir-cu	1	Cu....	1	Cu-st.	S. W.	3	N. W.	2	N. W.	1	13
1	St....	0	......	0	......	N. W.	3	N. W.	3	N. W.	1	14
2	Cu ...	2	Cu-st.	8	Nim..	S. W.	3	S. W.	4	S. W.	3	15
6	Cu....	2	Cu....	7	Cu....	S. W.	3	N	4	E	3	16
4	Cu-st .	3	Cir-cu	3	Cu....	E	2	N. E .	1	N. E .	2	17
1	Cir-st.	1	Cir-cu	9	Nim..	N	2	N	4	N	5	18
6	Cu....	7	Cu....	0	......	N. E..	3	N	4	N	1	19
7	Cu....	4	Cu....	4	Cu....	N. W.	1	W ...	3	N	2	20
0	......	1	Cu....	1	Cu....	N	2	N	2	N ...	1	21
0	......	2	Cu....	0	......	N	1	N. E..	1	S. E..	1	22
0	......	1	Cu....	1	Cu....	S	1	S. E..	1	S	2	23
4	Cn-st.	8	St....	4	St....	S	2	S. W.	2	W ...	2	24
3	Cu-st.	3	Cu....	3	Cu....	S	2	S	2	S	1	25
2	Cu....	2	Cu....	0	......	S .. .	2	W ...	4	N. W.	3	26
1	St....	3	Cu....	0	... ..	N	2	N	3	E	3	27
1	St....	6	St....	9	St....	N. E..	3	E	2	N. E .	4	28
7	Cu-st.	8	Cu-st.	0	......	S. E..	3	S. E..	2	S	1	29
1	Cu....	2	Cu....	6	Cu....	......	0	S	1	S	3	30
8	Nim..	4	St....	4	Cu....	S. E ..	2	S	2	S. E..	3	31
......	......	......	......	......	......	......	......	......	......	......	......	Sum
3	......	4	......	3	......	......	2	......	2	......	2	M'n.
......	......	......	......	......	......	......	......	......	......	......	......	Av.

JULY, 1871—continued.

Day of Month.	BAROMETER HEIGHT REDUCED TO FREEZING POINT.				FORCE OF PRESSURE OF VAPOR IN INCHES.			RELATIVE HUMIDITY OR FRACTION OF SATURATION.		
	7 A. M.	2 P. M.	9 P. M.	Mean.	7 A. M.	2 P. M.	9 P. M.	7 A. M.	2 P. M.	9 P. M.
1	28.745	28.849	28.930	28.841	.476	.409	.451	69	50	73
2	28.898	28.982	28.999	28.959	.451	.465	.482	73	47	66
3	28.974	28.904	28.857	28.909	.451	.436	.464	73	49	77
4	28.844	28.788	28.796	28.809	.429	.375	.457	77	39	69
5	28.789	28.793	28.712	28.765	.516	.561	.644	70	55	86
6	28.662	28.943	28.828	28.764	.556	.484	.443	84	56	65
7	28.935	28.916	28.917	28.923	.476	.443	.568	69	46	67
8	28.831	28.781	28.729	28.780	.568	.582	.677	67	41	60
9	28.917	28.974	29.373	29.051	.641	.564	.532	77	61	63
10	29.152	28.880	28.824	28.919	.451	.496	.516	78	70	84
11	28.808	28.753	28.803	28.788	.529	.470	.545	89	40	67
12	28.848	28.867	28.875	28.856	.505	.556	.545	56	40	67
13	28.853	28.894	28.914	28.853	.568	.572	.614	67	52	68
14	29.018	29.025	28.995	29.013	.551	.4 3	.422	75	46	54
15	28.991	28.904	28.873	28.926	.403	.478	.564	54	35	61
16	28.777	28.795	28.863	28.812	.705	.691	.306	81	63	43
17	28.955	28.918	28.868	28.913	.349	.356	.416	51	38	57
18	28.796	28.752	28.763	28.770	.411	.291	.380	60	31	56
19	28.872	28.932	28.977	28.927	.336	.285	.325	75	48	61
20	29.008	28.984	29.000	28.997	.296	.319	.410	59	47	83
21	29.062	29.121	29.108	29.097	.350	.303	.343	75	46	57
22	29.140	29.121	28.145	29.135	.367	.293	.343	71	40	57
23	29.178	29.132	29.100	29.136	.343	.273	.312	57	30	56
24	29.048	28.990	28.961	28.999	.354	.336	.323	66	37	44
25	28.964	28.845	28.859	28.889	.371	.447	.429	49	40	51
26	28.849	28.714	28.759	28.774	.476	. 87	.363	59	48	43
27	28.960	28.972	29.034	28.955	.489	.449	.457	75	52	69
28	29.121	29.084	29.058	29.088	.356	.350	.359	62	40	58
29	29.145	29.050	29.018	29.071	.416	.523	.581	72	41	72
30	29.058	29,017	29.007	29.027	.652	.610	489	73	50	75
31	29.054	29.037	28.883	29.021	.516	.610	.800	84	56	78
Sum	....	....	....	....	....	....	....	...	...	...
M'n.	....	....	....	28.928	.463	.453	.470	69	46	64
Av.	....	....	....	....	......	.462	......	...	59	...

1st. Sheet lightning in the south.
12th. Sheet lightning west, 10 P. M., with no clouds.
13th. Sheet lightning north, 10 P. M.
14th. Aurora borealis, not brilliant.
Evaporation from an open vessel 5.12 inches.

	S.	S.W.	W.	N.W.	N.	N.E.	E.	S.E.
Percentage of winds,	16	18	23	8	16	6	5	8

AUGUST, 1871.

THERMOMETER IN THE OPEN AIR.				RAIN OR SNOW.				
7 A. M.	2 P. M.	9 P. M.	Mean.	Time of beginning of rain or snow.	Time of ending of rain or snow.	Amount of rain or melted snow in gauge, in inches.	Depth of snow, in inches.	Day of Month.
72	86	78	78.6					1
74	77	74	75.0	10¼ A. M.	11½ A. M	.15		2
71	81	76	76.0	1 P. M ..		.23		3
72	81	72	75 0					4
70	75	73	72.6					5
74	86	73	77.6					6
73	80	66	73.0	10¾ A. M	Night ...			7
71	76	69	72.0			.76		8
68	81	70	73.0					9
70	91	71	77.3	6¼ P. M.	8 P..M ..	.75		10
66	72	68	68.6					11
61	76	66	67.6					12
65	81	74	73.3					13
76	81	72	76.3	8 P. M...	Night ...			14
73	83	78	78.0			.77		15
65	73	64	67.3					16
63	75	65	67.6					17
67	78	67	70.6					18
66	77	67	70.0					19
63	71	63	65.6					20
62	77	67	68.6					21
68	78	65	70.3	Night ...	8 A. M...	.41		22
62	77	70	69.6					23
63	75	73	70.3					24
60	65	58	61.0	3 P. M...	Night ...			25
58	70	64	64 0			.05		26
61	76	63	66.6					27
60	67	65	64.0	11½ A. M.				28
62	79	54	62.0		8 A. M...	.23		29
55	57	55	55.6					30
52	63	57	57.3					31
						3.35		S'm
			69.8					Mns
								Av.

AUGUST, 1871—continued.

Day of Month.	CLOUDS.						WINDS.					
	7 A. M.		2 P. M.		9 P. M.		7 A. M.		2 P. M.		9 P. M.	
	Amount of cloudiness.	Kind of clouds.	Amount of cloudiness.	Kind of clouds.	Amount of cloudiness.	Kind of clouds.	Direction.	Force.	Direction.	Force.	Direction.	Force.
1	4	Cu-st.	3	Cu ...	3	Cu ...	S. E..	2	S	1	S. E..	1
2	4	Cu ...	6	Cu ...	2	Cu ...	......	0	S	2	......	0
3	7	Nim..	2	Cir-st.	2	Cu . .	S. W.	1	S	1	S. W.	1
4	8	Cu ...	2	Cu ...	0	......	......	0	N. W.	1	N. W.	3
5	1	Cu ...	5	Cu-st .	1	Cu ...	N. E	1	N. W.	3	N. W.	1
6	0	......	1	Cu ...	1	Cu ...	W ...	1	W ...	3	......	0
7	4	Cu ...	2	Cu ...	8	Nim..	S	2	S	3	W ...	3
8	0	......	0	......	0	......	N. W.	3	N. W.	3	S. E..	2
9	1	St....	2	St....	0	......	......	0	S	2	S	1
10	1	St....	2	Cu ...	8	Nim..	S	1	S. W.	5	N	6
11	0	......	1	Cu ...	0	......	N	4	N	3	N	2
12	0	......	1	Cu ...	0	......	N	2	E	1	E	4
13	1	St....	1	Cu ...	1	Cu ...	S. E..	1	S	3	S	3
14	1	Cu ...	6	Cu-st .	10	Nim..	S	1	S ...	2	S. W.	2
15	6	Cu ...	2	Cu ...	1	Cu ...	......	0	S	2	S. W.	3
16	1	St....	1	Cu ...	0	......	N. W.	3	N. W.	3	N	1
17	0	......	0	......	0	......	N. W.	1	N. W.	2	N. W.	1
18	0	......	0	......	0	......	N. W.	3	N	1	E	1
19	1	Cu ...	2	Cu ...	3	Cu ...	N	2	N	5	W ...	1
20	2	Cu ...	6	Cu ...	1	Cu ...	N	4	N. W.	3	N. W.	1
21	0	......	1	St....	0	......	N. E..	2	S. E..	1	S. E..	3
22	10	Nim..	4	Cu-st .	0	......	N	1	......	0	N. W.	1
23	0	Fog ..	1	Cu ...	0	......	N	1	......	0	N	1
24	1	St....	3	Cu-st .	6	Cir-cu	N	1	N. E..	1	N. E..	2
25	6	Cu-st.	10	Cu . .	10	Nim..	N. E..	1	N. E..	2	N. E..	1
26	10	Cu ...	2	Cir-cu.	0	......	N. E..	1	N. E..	1	......	0
27	0	......	2	Cu ...	0	......	N	1	E	1	E	1
28	10	Cu ...	10	Nim..	1	Cu ...	E	2	E	2	......	0
29	10	Nim..	5	Cu ...	1	Cu ...	S. W.	1	S. W.	4	W ...	1
30	7	Cu ...	10	Cu ...	10	Cu ...	W ...	3	W ...	3	N W.	3
31	9	Cu-st .	3	Cu ...	0	... ..	S. W.	1	W ...	1	W ...	1
S 'm	....	......	....	......	....	......	......	...	......	....	......	....
Mns	3	......	3	......	2	......	......	1	......	2	......	2
Av.	....	......	3	......	....	......	......	....	......	....	......	....

AUGUST, 1871—continued.

BAROMETER HEIGHT REDUCED TO FREEZING POINT.				FORCE OR PRESSURE OF VAPOR, IN INCHES.			RELATIVE HUMIDITY OR FRACTION OF SATURATION.			Day of Month.
7 A. M.	2 P. M.	9 P. M.	Mean.	7 A. M.	2 P. M.	9 P. M.	7 A. M.	2 P. M.	9 P. M.	
28.900	28.856	28.891	28.882	.559	.596	.530	72	47	40	1
28.929	28.888	28.953	28.920	.604	.678	.718	73	73	86	2
28.941	28.934	28.902	28.925	.682	.664	.691	90	62	77	3
28.836	28.806	28.831	28.824	.706	.585	.489	90	56	62	4
28.862	28.856	28.842	28.853	.482	.415	.510	66	48	63	5
28.905	28.897	28.886	28.996	.532	.480	.581	63	39	72	6
28.822	28.889	28.806	28.839	.510	.638	.599	63	62	85	7
28.857	28.859	28.952	28.889	.572	.436	.398	76	49	56	8
29.009	28.975	28.934	28.972	.476	.403	.516	69	38	70	9
28.909	28.744	28.831	28.821	.482	.651	.403	66	45	38	10
28.997	29.042	29.040	29.026	.407	.422	.543	63	54	79	11
29.103	29.042	28.994	29.037	.354	.470	.438	66	52	68	12
28.977	28.906	28.859	28.914	.516	.510	.604	84	48	73	13
28.989	28.967	28.927	28.961	.614	.704	.668	68	66	86	14
28.944	28.918	28.895	28.919	.693	.936	.744	85	83	78	15
29.053	29.094	29.122	29.092	.389	.376	.403	63	47	67	16
29.180	29.030	29.001	29.090	.416	.350	.389	72	40	63	17
29.014	29.601	28.941	28.985	.457	.409	.522	69	43	79	18
28.941	28.920	28.865	28.906	.438	.389	.457	68	42	69	19
28.834	28.859	28.920	28.871	.416	.403	.416	72	54	72	20
28.997	28.944	28.944	28.962	.399	.492	.489	72	53	75	21
28.881	29.009	29.044	29.011	.577	.626	.389	85	65	63	22
29.133	29.020	29.066	29.073	.399	.492	.516	72	53	70	23
29.138	29.082	29.095	29.076	.356	.287	.502	62	33	78	24
29.030	29.022	29.000	29.017	.367	.420	.337	71	68	70	25
28.919	28.854	28.853	28.875	.394	.385	.403	82	53	67	26
28.866	28.883	28.893	28.881	.442	.470	.416	83	52	72	27
28.746	28.526	28.478	28.576	.426	.591	.516	82	89	84	28
28.389	28.400	28.515	28.434	.491	.449	.335	88	61	80	29
28.571	28.704	28.838	28.704	.321	.268	.269	74	58	62	30
28.984	28.994	28.995	28.991	.308	.270	.295	79	47	63	31
....	....	....	....	......	......	......	....	....	...	S 'm
....	....	....	28.915	.489	.492	.486	76	56	73	Mns
....	....	....	....	......	.489	......	....	68	...	Av .

	S.	S.W.	W.	N.W.	N.	N.E.	E.	S.E.
Percentage of Winds—	15	11	11	22	22	7	6	6.

Evaporation, 5.63 inches.

SEPTEMBER, 1871.

Day of Month.	THERMOMETER IN THE OPEN AIR.				RAIN OR SNOW.			
	7 A. M.	2 P. M.	9 P. M.	Mean.	Time of beginning of rain or snow.	Time of ending of rain or snow.	Amount of rain or melted snow in gauge, in inches.	Depth of snow, in inches.
1	56	71	66	64.3				
2	67	84	74	75.0				
3	70	82	74	75.3				
4	68	88	70	75.3				
5	69	87	75	77.0				
6	61	67	60	62.6				
7	53	68	56	59.0				
8	52	77	70	66.3				
9	65	63	60	62.6				
10	54	67	56	59.0				
11	53	68	58	59.6				
12	53	68	63	61.3				
13	58	69	57	61.3	Night			
14	49	54	52	51.6		10 A. M.	.05	
15	50	62	56	56.0				
16	55	62	60	59.0	8¾ A.M.	11½ A.M.	.37	
17	48	59	50	52.6				
18	54	82	57	64.3				
19	52	55	53	53.3				
20	45	53	48	48.6				
21	42	60	52	51.5				
22	47	75	68	63.3				
23	58	80	69	69.0				
24	55	70	58	61.0				
25	58	50	50	52.6	11½ P.M.	2½ P.M.	.05	
26	46	53	50	49.6				
27	43	54	50	49.0				
28	40	51	48	46.3				
29	43	62	52	52.3				
30	44	68	57	56.3				
Sum							.47	
M'n.				59.8				
Av.								

SEPTEMBER, 1871—continued.

CLOUDS.						WINDS.						
7 A. M.		2 P. M.		9 P. M.		7 A. M.		2 P. M.		9 P. M.		
Amount of Cloudiness.	Kind of Clouds.	Amount of Cloudiness.	Kind of Clouds.	Amount of Cloudiness.	Kind of Clouds.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Day of Month.
6	Cu-st.	8	Cu-st .	0	......	S E..	1	S	2	S E...	1	1
1	Cir. ..	2	Cu-cir.	1	Cu ...	S W..	2	S W..	2	S W..	1	2
0	......	1	Cu....	0	......	......	0	......	0	S	1	3
1	Cu ...	3	Cir-cu.	10	Cu ...	......	0	S W..	3	N W..	2	4
4	Cir-cu.	1	Cu....	4	Cu ...	S W..	1	S	3	W ...	3	5
3	Cu ...	0	......	0	......	N W-.	3	N W .	2	N W.	2	6
0	......	0	......	0	......	N E..	1	E	2	S E..	3	7
0	......	0	......	0	......	S E..	2	S	3	S	1	8
10	Cu ...	10	Cu....	3	Cu ...	N W..	3	N	2	N	1	9
3	Cir-cu.	4	Cir-cu.	2	Cu ...	N W..	1	E	1	......	0	10
7	Cir-cu.	3	Cir-cu.	2	Cu ...	E	1	N E..	1	E	1	11
1	Cir-cu.	9	Cu....	3	Cu ...	......	0	......	0	W ...	1	12
8	Cir-cu.	10	Cu....	10	Cu ...	......	0	N E..	1	N E..	2	13
10	Nim. .	10	Cu....	10	Cu ...	N E..	2	N E..	2	N E..	1	14
8	Cu ...	0	......	4	Cir-cu.	N E..	1	......	0	S E..	1	15
10	Cu....	10	Cu....	6	Cu ...	S	1	S	1	N W .	1	16
0	......	0	......	0	......	N	1	N E..	1	S E..	2	17
3	Cir-cu.	3	Cu....	0	......	S	1	S W..	2	N W .	2	18
10	Cu-st.	10	Cu-st .	10	Cu ...	N W..	3	N	2	N	2	19
8	Cu-st.	2	Cu-st .	0	......	N E..	2	N	1	N	1	20
5	Cir-cu.	2	Cir-cu.	0	......	......	0	S	1	S	1	21
4	Cir-cu.	2	Cir-cu.	3	Cu ...	S E..	2	S	3	S W..	2	22
0	......	0	.....	0	......	S W..	1	W ...	1	W ...	1	23
0	......	0	......	0	......	......	0	......	0	......	0	24
10	Cu ...	10	Nim. .	0	......	S W..	1	W ...	1	N W .	2	25
10	Cu-st.	10	Cu-st .	10	Cu ...	N W..	2	N W .	3	N W .	2	26
5	Cu-st.	8	Cu....	3	Cir-cu.	N W..	2	N W .	2	N W .	2	27
0	......	2	Cu....	0	......	N W..	2	N	1	N	1	28
0	......	0	......	0	......	......	0	N W .	1	W ...	1	29
0	......	0	......	0	......	......	0	S	1	S	1	30
....	......	....	......	....	......	......	....	......	....	......	....	S'm.
4	......	4	......	3	......	......	1	......	1.5	......	1.5	M's.
....	......	4	......	....	......	......	....	......	....	......	....	Av.

SEPTEMBER, 1871—continued.

Day of Month.	BAROMETER HEIGHT REDUCED TO FREEZING POINT.				FORCE OF PRESSURE OF VAPOR IN INCHES.			RELATIVE HUMIDITY OR FRACTION OF SATURATION.		
	7 A. M.	2 P. M.	9 P. M.	Mean.	7 A. M.	2 P. M.	9 P. M.	7 A. M.	2 P. M.	9 P. M.
1	29.063	29.016	29.008	29.029	.308	.371	.438	69	49	68
2	29.052	29.053	29.102	29.069	.393	.584	.604	59	50	73
3	29.150	29.121	29.030	29.100	.621	.534	.680	85	49	81
4	29.000	28.868	28.948	28.938	.476	.344	.449	69	26	61
5	28.865	28.759	28.782	28.802	.436	.393	.484	57	31	56
6	28.934	28.982	29.028	28.981	.413	.274	.283	77	41	54
7	29.140	29.093	29.042	29.092	.269	.261	.230	67	38	51
8	29.014	28.916	28.958	28.962	.282	.291	.385	73	31	53
9	29.055	29.178	29.269	29.167	.451	.299	.338	73	52	65
10	29.352	29.317	29.291	29.320	.335	.218	.282	80	33	63
11	29.294	29.240	29.255	29.263	.295	.232	.282	73	34	58
12	29.269	29.238	29.207	29.238	.295	.349	.327	73	51	57
13	29.207	29.190	29.214	29.203	.337	.336	.268	70	47	58
14	29.179	29.164	29.121	29.155	.272	.335	.282	78	80	73
15	29.042	28.983	28.981	29.002	.309	.284	.282	85	51	63
16	28 920	28.892	28.955	28.922	.349	.429	.426	81	77	82
17	29.146	29.102	29.048	29.099	.285	.269	.283	85	54	78
18	28.910	28.724	28.892	28.808	.335	.497	.268	80	45	58
19	28.987	29.020	29.062	29.023	.282	.269	.269	73	62	67
20	29.156	29.166	29.196	29.172	.204	.170	.260	68	42	78
21	29.234	29.157	29.065	29.152	.222	.203	.257	83	39	66
22	28.902	28.664	28.669	28.745	.202	.197	.261	62	23	38
23	28.767	28.748	28.837	28.784	.337	.190	.191	70	18	27
24	28.932	28.954	28.931	28.939	.218	.150	.153	50	20	32
25	28.924	28.931	28.920	28.925	.153	.258	.234	32	71	65
26	28.964	28.947	28.971	28.961	.215	.170	.210	69	42	58
27	28.996	28.971	29.009	28.992	.186	.181	.186	67	43	51
28	29.134	29.164	29.214	29.171	.182	.149	.165	73	40	49
29	29.338	29.322	29.275	29.311	.186	.101	.136	67	18	35
30	29.317	29.241	29.173	29.244	.151	.177	.142	52	26	30
Sum	......	......	......	......	......	......	......	....	....	....
M'n	......	......	......	29.045	.300	.283	.302	70	42	58
Av	......	......	......	......	......	.295	......	....	56	....

First frost morning of September 21; slight, partially killing most tender plants, as tomatoes, melons, etc.

Morning of 28, frost.

Morning of 29, frost.

Evaporation for the month. 3.47 inches.

	S.	S.W.	W.	N.W.	N.	N.E.	E.	S.E.
Percentage of Winds—	16	13	8	30	10	11	4	10.

OCTOBER, 1871.

THERMOMETER IN THE OPEN AIR.				RAIN OR SNOW.				
7 A. M.	2 P. M.	9 P. M.	Mean.	Time of beginning of rain or snow.	Time of ending of rain or snow.	Amount of rain or melted snow in guage, in inches.	Depth of snow in inches.	Day of Month.
50	74	62	62.0					1
53	65	53	57.0					2
53	77	65	65.0					3
55	74	70	66.3					4
59	63	50	57.3					5
39	51	48	46.0					6
44	64	58	55.3					7
55	80	73	69.3					8
62	74	63	66.3	5¼ P.M.				9
43	49	42	43.6		Night ...	.58		10
38	60	50	49.3					11
44	62	57	54 3					12
53	59	51	54.3	6 P. M.				13
45	53	50	49.3					14
40	53	45	46.0		Night ...	.89		15
44	52	45	47.0					16
47	55	45	49.0					17
37	52	48	45.6					18
49	68	52	56.3					19
36	54	41	43.6					20
46	72	60	59.3					21
53	73	62	62.6					22
55	72	51	59.3					23
44	57	47	49.3					24
51	58	60	56.3	3½ P.M.				25
46	52	48	48.6		Night....	.85		26
31	39	32	34.0					27
27	42	38	35.6					28
40	54	47	47.0					29
34	45	48	42.3					30
35	35	35	35.0	Night ...	7½ P. M.	.75	3	31
						3.07	3	Sum
			52.0					M'n.
								Av.

CCTOBER, 1871—continued.

Day of Month.	CLOUDS.						WINDS.					
	7 A. M.		2 P. M.		9 P. M.		7 A. M.		2 P. M.		9 P. M.	
	Amount of Cloudiness.	Kind of Clouds.	Amount of Cloudiness.	Kind of Clouds.	Amount of Cloudiness.	Kind of Clouds.	Direction.	Force.	Direction.	Force.	Direction.	Force.
1	3	Cir-cu.	2	Cir-cu	4	Cir-cu	S. E..	1	S	1	......	0
2	1	Cir. ..	4	Cir-Cu	0	......	S	1	W ...	3	W. ..	1
3	4	Cir-cu.	0	......	0	......	W. ..	2	W ...	3	N. W.	2
4	9	Cu. ..	0	......	0	......	......	0	S	2	S	2
5	6	Cu. ..	10	Cu. ..	10	Cu. ..	W. ..	1	W. ..	2	W. ..	4
6	1	Cu. ..	0	......	4	Cu. ..	N. W.	3	......	0	......	0
7	4	Cir-cu.	5	Cir-cu	0	......	S	3	S. W.	2	S. W.	1
8	1	Cir. ..	1	Cir...	0	......	S	2	S. W.	3	S	3
9	8	Cir-cu.	6	Cu. ..	10	Nim..	S	2	S. W.	3	S	4
10	10	Cu-st.	7	Cu. ..	0	......	S. W.	4	W. ..	3	W. ..	2
11	0	......	4	Cu. ..	3	Cu....	S. W.	2	S. W.	1	S. W.	2
12	3	Cir-st.	4	Cir-cu	3	Cu....	S. E..	2	S	1	S	2
13	6	Cu-st.	10	Cu....	10	Nim..	S	1	S	2	S. W.	1
14	10	Nim..	10	Nim..	10	Nim..	N. W.	2	N	1	N. W.	2
15	5	Cu. ..	0	......	0	......	W. ..	2	S. W.	2	S. W.	2
16	0	......	1	Cir-cu	6	Cu-st.	W. ..	2	N. W.	3	W. ..	2
17	4	Cu-st.	3	Cu....	1	St....	S. W.	2	N. W.	3	N	3
18	2	Cir-st.	1	Cir cu.	1	St....	S. W.	1	S	2	S	3
19	1	Cir. ..	0	......	0	......	S. W.	3	N. W.	2	N. W.	2
20	1	Cu-st.	0	......	0	......	N. E .	1	S. E..	1	S. E..	1
21	0	......	0	......	0	......	S	2	S. W.	3	S. W.	1
22	1	Cir. ..	0	... ..	0	......	S. W.	2	S. W.	3	S. W.	2
23	0	......	1	Cu. ..	1	Cu....	S. W.	1	......	0	N. E .	2
24	6	Cu. ..	0	......	0	......	N. E .	2	N. E .	1	E	2
25	10	Cu. ..	10	Cu. ..	10	Nim..	E	2	S. E..	1	S. E..	1
26	8	Cu-st	1	Cir...	0	......	S. W.	3	W. ..	4	W. ..	3
27	10	Cu. ..	5	Cu....	7	Cu....	W. ..	4	W. ..	4	N. W.	2
28	1	Cir. ..	4	Cir-cu	3	Cu....	N. W.	2	N. W.	1	N. E .	2
29	6	Cu....	4	Cir-cu	6	Cu....	E	2	S. E..	3	S. E..	2
30	3	Cir-st.	3	Cir-cu	7	Cu-st.	W. ..	3	N. W.	1	N. W.	3
31	10	Nim..	10	Nim..	2	Cu-st.	N. E .	3	N	4	N	3
S 'm	....	......	....	......	....	......	......	....	......	....	......	...
Mns	4	... ..	3	......	3	......	......	2	......	2	.....	2
Av.	....	......	3	......	....	......	......	...	......	2	......	....

OCTOBER, 1871—continued.

BAROMETER HEIGHT REDUCED TO FREEZING POINT.				FORCE OF PRESSURE OF VAPOR IN INCHES.			RELATIVE HUMIDITY OR FRACTION OF SATURATION.			Day of Month.
7 A. M.	2 P. M.	9 P. M.	Mean.	7 A. M.	2 P. M.	9 P. M.	7 A. M.	2 P. M.	9 P. M.	
29.135	29.032	28.967	29.044	.162	.153	.202	45	18	36	1
28.867	28.826	28.871	28.854	.219	.163	.194	54	26	48	2
28.740	28.664	28.702	28.702	.194	.128	.163	48	13	26	3
28.785	28.636	28.530	28.650	.168	.234	.190	39	32	38	4
28.699	28.736	28.867	28.767	.190	.216	.234	38	37	65	5
29.020	29.013	29.009	29.013	.152	.081	.099	63	22	29	6
28.942	28.855	28.890	28.895	.151	.124	.129	52	21	27	7
28.816	28.739	28.746	28.767	.166	.251	.283	36	24	35	8
28.708	28.598	28.553	28.619	.202	.363	.345	36	43	42	9
28.548	28.644	28.816	28.669	.164	.152	.134	59	44	50	10
28.786	28.846	28.851	28.842	.144	.152	.186	63	29	51	11
28.851	28.852	28.947	28.883	.151	.150	.191	52	27	41	12
28.988	28.915	28.896	28.933	.194	.190	.308	48	38	79	13
28.891	28.663	28.372	28.642	.241	.318	.309	84	86	85	14
28.979	29.037	29.034	29.017	.139	.170	.160	56	42	53	15
29.039	29.034	29.072	29.048	.173	.068	.130	60	17	45	16
28.932	29.011	29.084	29.021	.156	.168	.138	48	39	46	17
29.247	29.158	28.989	29.131	.136	.113	.165	62	29	49	18
28.919	28.873	29.077	28.986	.175	.204	.159	50	30	41	19
29.218	29.143	29.040	29.133	.170	.157	.169	80	38	65	20
28.963	28.899	28.891	28.918	.215	.208	.203	89	26	39	21
28.883	28.829	28.846	28.852	.194	.253	.312	48	31	56	22
28.864	28.861	28.981	28.902	.295	.327	.149	68	42	40	23
29.017	28.969	28.948	28.978	.295	.216	.225	68	46	70	24
28.863	28.763	28.644	28.757	.270	.394	.456	72	82	88	25
28.601	28.735	28.748	28.695	.215	.159	.143	69	41	43	26
28.751	28.771	28.847	28.789	.082	.079	.070	47	34	39	27
28.931	28.945	28.989	28.955	.111	.134	.123	75	50	54	28
29.008	28.905	28.835	28.916	.160	.181	.202	64	43	62	29
29.052	29,101	29.172	29.108	.138	.117	123	71	39	54	30
29.059	28.849	28.900	28.936	.183	.162	.142	90	80	70	31
......	....	....	....	......	......	......	....	....	...	Sum
......	....	....	28.885	.181	.187	.194	58	37	50	M'n.
......	....	....	....	......	.187	......	....	48	...	Av.

October 31st, first snow,
Evaporation from an open vessel, 2.71 inches.

SUMMARY FOR THE YEAR ENDING OCTOBER 31, 1871.

MONTHS.	THERMOMETER IN OPEN AIR.				BAROMETER HEIGHT REDUCED TO 32 DEGREES.				RAIN AND SNOW.		Evaporation in inches fr'm an open vessel.	Amount of cloudiness.
	Max.	Min.	Mean.	Variation	Max.	Min.	Mean.	Fluctua-tion.	Amount of rain & melt'd snow in gauge in in.	Amount of snow in inches.		
November	64	19	38.6	45	29.368	28.278	28.294	1.090	0.53	......	....	4.0
December............	48	−13	22.1	61	29.391	28.141	28.910	1.250	0.67	4	....	5.0
January	55	−2	20.7	57	29.493	28.319	28.904	1.184	2.32	20	....	6.5
February	46	−4	23.7	50	29.396	28.104	28.859	1.292	1.43	10	....	5.0
March	60	20	35.4	40	29.210	28.138	28.814	1.072	2.96	......	....	6.0
April	82	33	46.0	49	29.168	28.071	28.692	1.097	2.00	......	....	5.0
May....................	86	38	61.0	48	29.211	28.680	28.909	0.531	3.31	......	4.65	3.0
June	89	54	69.3	35	25.519	28.631	28.900	0.719	4.93	......	5.43	3.0
July....................	90	56	71.1	34	29.373	28.662	28.928	0.711	2.11	......	5.12	3.0
August	91	52	69.8	39	29.180	28.389	28.915	0.791	3.35	......	5.63	3.0
September	88	40	59.8	48	29.352	28.664	29.045	0.698	0.47	......	3.47	4.0
October..............	80	27	52.0	53	29.247	28.372	28.885	0.875	3.07	3	2.71	3.0
Sums	......	......	....	......	....	....	....	....	27.15	37	....	.....
Means	73.2	27.5	47.4	......	29.325	28.392	28.973	....	....	......	....	.....

Summary for the year ending October, 1871—continued.

MONTHS.	FORCE OR PRESSURE OF VAPOR IN INCHES.			PERCENTAGE OF SATURATION.			PERCENTAGE OF WINDS.							
	Max.	Min.	Mean.	Max.	Min.	Mean.	S.	S. W.	W.	N. W.	N.	N. E.	E.	S. E.
November	.403	.076	.159	100	30	67	17	23	12	29	11	1	1	6
December	.212	.025	.110	100	29	87	13	10	30	25	9	9	0	4
January	.310	.040	.101	100	40	91	10	14	17	24	10	12	1	12
February	.311	.036	.120	100	49	87	27	14	18	4	10	14	6	7
March	.578	.106	.161	100	36	75	7	16	22	16	3	13	14	9
April	.425	.103	.215	100	24	61	21	23	12	13	5	8	10	8
May	.682	.118	.359	100	22	61	14	9	4	11	5	24	11	22
June	.809	.257	.486	90	31	62	11	4	24	11	13	9	8	20
July	.691	.296	.462	89	30	59	16	18	23	8	16	6	5	8
August	.936	.268	.489	90	33	68	15	11	11	22	22	7	6	6
September	.584	.136	.295	85	18	56	16	13	8	30	10	11	4	10
October	.394	.070	.187	80	17	48	18	23	24	15	6	6	2	6
Sums														
Means			.254			68	15	15	17	17	10	10	6	10

TREASURER'S REPORT.

MADISON, Oct. 2, 1871.

HON: C. S. HAMILTON, *President of the Board of Regents of the University of Wisconsin:*

SIR: I have the honor herewith to transmit to you my annual report as Treasurer of the University of Wisconsin, for the fiscal year ending September 30, 1871, as required by the rules and regulations of your board.

Very respectfully,
Your obedient servant,
HENRY BÆTZ, State Treasuer,
Ex-officio Treasurer of the University.

Report of Henry Bætz, *Treasurer of the University of Wisconsin, showing the receipts and disbursements of the University during the fiscal year, ending September* 30, 1871.

RECEIPTS.		
Balance, October 1, 1870		$20,740 58
Amount transferred from University Fund Income	$21,858 82	
Amount transferred from Agricultural College Fund Income	12,212 29	
Appropriation—chapter 82, laws of 1867	7,303 76	
Female College Building, appropriation as per chapter 54, laws of 1870	40,000 00	
		81,374 87
Total receipts, including balance as above		$102,115 45
DISBURSEMENTS.		
Salaries of professors and teachers	$23,607 17	
Expenses of Regents	365 05	
Insurance	470 50	
Repairs	2,259 01	
Incidental expenses	4,012 72	
Fuel	486 25	
Printing and advertising	798 87	
Library	351 50	
Furniture	350 75	
Apparatus	468 22	
Tuition fees refunded, and room rent	206 00	
Improvements	5,166 15	
Experimental Farm	4,580 74	
Female College building	33,957 49	
Contingent advances	100 00	
Total disbursements	$77,180 42	
Balance on hand, September 30, 1871	24,935 03	
		$102,115 45

HENRY BÆTZ, State Treasurer,
Ex-officio Treasurer of the University.

SECRETARY'S REPORT.

MADISON, November 1, 1871.

GEN. C. S. HAMILTON, *President of the Regents of the University of Wisconsin:*

SIR: I have the honor to submit the following statement of the financial condition of the State University, exhibiting the amount of productive funds on hand, and also the receipts and disbursements of the income of the several funds for the year ending September 30, 1871.

UNIVERSITY FUND.

This fund consists of the proceeds of the sales of land granted by Congress for the support of the University.

RECEIPTS.		
Sales of land	$818 22	....
Dues on certificates	2,651 76	....
Penalties	70 80	....
Taxes	5 20	....
Loans	410 00	....
Transferred from School Fund	59 40	....
	$4,015 38	
DISBURSEMENTS.		
Loans	....	$4,650 00
Refunded for overpayments	....	502 75
	$4,015 38	$5,152 75
Balance September 30, 1870	1,935 97	....
Balance September 30, 1871	....	798 60
	$5,951 35	$5,951 35

The amount of this fund which was productive on the 30th days of September, 1870 and 1871, respectively, was as follows:

	1870.	*1871.*
Amount due on certificates of sale	$67,074 14	$66,107 38
Amount due on mortgages	6,792 00	11,032 00
Certificates of indebtedness	111,000 00	111,000 00
Dane county bonds	19,000 00	19,000 00
Total productive fund	$203,866 14	$207,139 38

Showing an increase in the productive fund during the last year of $3,273.24.

AGRICULTURAL COLLEGE FUND.

This fund consists of the proceeds of the sales of 240,000 acres of lands granted by Congress to the State for the support of an institution of learning where shall be taught the principles of agriculture and the arts. The interest on the productive fund forms the income.

RECEIPTS.		
Sales of land	$7,222 15	....
Dues on certificates	958 00	....
Penalties	892 43	....
Loans	100 00	....
Transfer from Agricultural College Fund Income.	2 92	....
	$9,175 50	....
DISBURSEMENTS.		
Loans	....	$3,625 00
United States bonds purchased	....	4,175 00
Refunded for overpayments	....	76 69
	$9,175 50	$7,876 69
Balance September 30, 1870	8,923 07	....
Balance September 30, 1871	....	10,221 88
	$18,098 57	$18,098 57

The amount of this fund which was productive on the 30th days of September, 1870 and 1871, respectively, was as follows:

	1870.	*1871.*
Dues on certificates of sale	$118,646 20	$129,570 20
Dues on mortgages	6,100 00	9,625 00
Certificates of indebtedness	33,600 00	33,600 00
Dane county bonds	6,000 00	6,000 00
United States bonds	....	4,175 00
	$159,346 20	$182,970 20

Showing an increase in the productive fund during the last year of $23,624.00.

FEMALE COLLEGE FUND.

This fund consists of an appropriation made by chapter 54, general laws of 1870, amounting to $50,000, for the purpose of building an additional university edifice. By the terms of the act, $10,000 of the sum appropriated was to be placed at the disposal of the Regents on the first day of May, 1870, and the remainder on the first day of May, 1871.

Plans and specifications for a new building, to be occupied by the Female Department of the University, were prepared, and advertisements " for proposals " to build said building were published in a newspaper in five of the principal cities of the state. The contract was awarded to Hon. John Fellenz, of Milwaukee, on the 21st day of July, 1870, and the building will be completed and ready for occupancy at the commencement of the winter term in December next.

RECEIPTS.		
From approproation	$50,000	....
DISBURSEMENTS.		
Paid on account of new building	....	$38,120 77
Balance in the fund Sept. 30, 1871	....	11,879 23
	$50,000 00	$50,000 00

The receipts and disbursements for the year ending September 30, 1871, are as follows:

RECEIPTS.		
Income from productive University Fund	$14,039 60	
Income from productive Agricultural Col. Fund	12,212 29	
Appropriation by chapter 82, Gen. Laws of 1867	7,303 76	
From students, for tuition and room rent	6,670 00	
From students, for chemicals sold them	330 85	
From students, for fuel sold them	109 31	
From Experimental Farm, sale of products, etc.	299 81	
From Experimental Farm, sale of lots	359 25	
From Thos. B. Van Horne, contingent advance returned	50 00	
Balance of appropriation for new building	40,000 00	
	$81,374 87	
DISBURSEMENTS.		
On account of new College Building		$33,957 49
On account of Experimental Farm		4,580 74
Salaries of instructional force		23,607 17
Expenses of Regents		365 05
Insurance		470 50
Repairs		2,259 01
Incidental expenses		4,012 72
Fuel		486 25
Printing and advertising		798 87
Library		351 50
Furniture		350 75
Apparatus		468 22
Room rent		206 00
Improvements		5,166 15
Contingent advance to be returned		100 00
Total receipts and disbursements	$81,374 87	$77,180 42
Balance in hands of treasurer, Sept. 30, 1870	20,740 58	
Balance in hands of treasurer, Sept. 30, 1871		24,935 03
	$102,115 45	$102,115 45

The accounts audited and paid during the fiscal year ending September 30, 1871, were in detail as follows:

FEMALE COLLEGE BUILDING.		
John Fellenz, estimates on contract	$32,725 76	
E. H. Klerke, superintending architect	472 38	
J. H. Keyser, on account of furnaces	600 00	
Fish & Stephens, constructing well	122 60	
N. B. Cramton, anchors	36 75	
		$33,957 49
EXPERIMENTAL FARM.		
Thos. B. Van Horne, salary & board'g farm hands	221 14	
Thos. B. Van Horne, amount paid farm laborers	190 97	
W. Ramsey & Co., merchandise	36 96	
Martin Welch, labor on farm	4 00	
J. L. W. Newton, blacksmithing	9 90	
James Welch, labor on farm	260 00	
Lewis Furness, labor on farm	16 16	
P. F. Gorman, labor on farm	177 33	
James M. Ashby, labor on farm	294 30	
Dennis Foley, labor on farm	19 62	
A. F. Catten, amount paid for student's labor	107 94	
A. F. Catten, boarding farm hands	235 12	
A. F. Catten, salary as superintendent	121 00	
Bunker & Vroman, lumber	72 29	
J. F. Genal, manure	12 00	
N. B. Cramton, blacksmithing	113 08	
Thos. Chynoweth, repairing harness	5 18	
L. P. Drake, surveying	35 00	
J. K. Fuller, doctoring horse	4 00	
Daniel Humphrey, Devon cattle	94 00	
S. L. Sheldon, buckeye drill	80 00	
Stevens & Son, seeds	6 25	
M. Anderson, for 3 pigs	30 00	
August Rosen, repairing farm wagons	21 55	
Joseph Boyer, building cistern	142 17	
Seifert & Lawton, maps of farm	60 00	
Vroman, Frank & Co., merchandise	78 27	
H. H, NcAfee, boarding hands	201 58	
H. H. McAfee paid for students labor	724 81	
H. H. McAfee, bills paid by him	136 53	
H. H. McAfee, salary as superintendent	316 67	
John Byrne........labor on farm	65 61	
W. D. Sandell............do	121 00	
L. Flannagan............do	28 25	
James Kelley............do	66 99	
Michael Shanley........do	71 49	
John Damon............do	18 75	
Barney Fitzpatrick.......do	107 24	
Charles Hughes.........do	55 87	
John Walsur............do	42 00	
E. Wood................do	12 00	
A. K. Thompson.........do	7 50	
J. S. Ames..............do	40 37	
Thos. E. Baumann.......do	45 85	

Accounts audited and paid—continued.

Experimental Farm—continued.

Richard Dudgeon, labor on farm	$53 50	
John Kelley...........do	7 50	$4,580 74

SALARIES OF INSTRUCTIONAL FORCE.

J. H. Twombly, President	$875 00	
J. W. Sterling, Vice President	2,500 00	
J. B. Parkinson,..Professor	1,800 00	
S. H. Carpenter,.....do	1,800 00	
Wm. F. Allen,.......do	1,800 00	
J. B. Feuling........do	1,800 00	
W. W. Daniells......do	1,800 00	
J. E. Davies.........do	1,800 00	
R. D. Irving.........do	1,650 00	
Wm. J. L. Nicodemus,do	1,200 00	
Alex. Kerr..........do	950 00	
R. B. Anderson,...Instructor	850 00	
D. B. Frankenberger..do	225 00	
A. C. Parkinson......do	150 00	
R. M. Bashford......do	50 00	
Stephen Leahey.....do	300 00	
Thos. D. Christie.....do	86 02	
H. S. Orton, Dean of Law Faculty	1,000 00	
J. H. Carpenter, Professor of Law	500 00	
Wm. F. Vilas........do	500 00	
P. A. Chadbourne, Lecturer	300 00	
J. C. Pickard, Judgment	373 74	
John Stewart.......Instructor	33 33	
L. W. Colby...........do	66 67	
Miss C. L. Ware.......do	450 00	
Miss C. D. Bewick.....do	53 33	
Miss Lizzie S.Spencer,..do	425 00	
Miss Josephine Magoon, do	53 76	
Mrs. D. E. Carson, Preceptress	215 32	$23,607 17

EXPENSES OF REGENTS.

Chas. S. Hamilton	$72 30	
Aug. L. Smith	63 50	
J. S. Bugh	60 50	
F. O. Thorpe	16 00	
H. H. Gray	46 00	
B. R. Hinckley	59 60	
H. K. Smith	15 00	
J. R. Brigham	28 75	
R. B. Sanderson	3 40	$365 05

INSURANCE.

Main & Spooner, agents	$175 00	
Jos. W. Hobbins, agent	137 50	
C. Ainsworth, agent	137 50	
Madison Mutual Insurance Company	20 50	$470 50

Accounts audited and paid—continued.

REPAIRS.		
W. Ramsey & Co., merchandise	$30 50	....
Jones & Mason, merchandise	208 62	....
Fish & Stephens, mason work	386 15	....
E. Sharp & Co, plastering, etc	9 63	....
Geo. Gifford, painting	95 00	....
E. Morden, pump	10 00	....
Bunker & Vroman, lumber	385 56	....
N. B. Cramton, blacksmithing	20 55	....
G. W. Pitkin, paint	11 75	....
James McDowell.....carpentering	704 25	....
Hobart Scheffer.............do	60 75	....
Charles Daniells...........do	103 50	....
Joseph Robalt...........do	62 00	....
James Beeson.............do	29 00	....
Conrad Guntlach...........do	66 38	....
John Dolan...............do	70 87	....
Herbert Sylvester..........do	4 50	....
		$2,259 01
INCIDENTAL EXPENSES.		
J. W. Sterling. bills paid by him	$302 67	....
Patrick K. Walsh, janitor's services	540 00	....
Patrick K. Walsh, expenses of house cleaning	77 00	....
Lawrence Flannagan, janitor's services	330 50	....
Andrew Kentzler, livery	54 50	....
W. Ramsey & Co., merchandise	46 85	....
J. E. Davies, chemicals	3 50	....
J. F. Luhme & Co., chemicals	598 01	....
John Matthews, cleaning well	12 00	....
Allen & Mackey, matting	134 57	....
W. J. Park & Co., stationery	1 98	....
Moseley & Bro.. stationery	92 95	....
John S. Dean, salary as secretary	275 00	....
John S. Dean, postage	2 60	....
N. B. Van Slyke, bills paid	73 56	....
M. Hawks, cleaning privy	12 00	....
H. H. Gray, traveling expenses	242 00	....
C. S. Hamilton, traveling expenses	175 00	....
M. M, Dorn & Co., livery	5 00	....
J. C. Gregory, bill paid	5 25	....
W. J. & F. Ellsworth, crockery	3 85	....
Lake City Cornet Band, music	50 00	....
W. H. Noland, music	15 00	....
B D. Miner, refreshments at reception	58 90	....
Thomas Dempsey, cleaning well	6 00	....
Vroman, Frank & Co., lumber	107 35	....
Madison Manufacturing Co., labor and materials	40 94	....
Dunning & Sumner, merchandise	427 54	....
J. C. Wicker, coal	13 00	....
Hatch & Co., diplomas	41 00	....
M. A. Reynolds, lighting halls	56 05	....
Madison Gas Light and Coke Company, coke	7 50	....
J. B. Wiser, plank	90	....
Cooks Bro., hides	13 80	....

Accounts audited and paid—continued.

Incidental Expenses—continued.		
W. P. Ten Broeck, expenses as visitor	$40 90	
H. C. Tilton ...do	36 80	
W. W. Field ...do	35 60	
E. Graham ...do	13 05	
M. Sheard, preparing plans	50 00	
S. Klauber & Co., ribbon for diplomas	3 50	
C. E. Bross, telegrams to Boston	6 10	$4,012 72
FUEL.		
J. W. Sterling, paid for wood	$105 37	
Conklin, Gray & Co., coal	46 00	
John Schave, wood	102 00	
David McAvoy, wood	112 88	
D. Meredith, wood	120 00	$486 25
PRINTING AND ADVERTISING.		
Atwood & Culver, printing catalogues, etc.	$506 80	
J. W. Sterling, advertising bills paid	68 62	
Morrow & Brother, advertising	178 20	
George Hickok, printing	4 50	
J. B. Parkinson & Co., printing	33 25	
Wisconsin Journal of Education	7 50	$798 87
LIBRARY.		
W. J. Park & Co., books	$210 32	
Moseley & Brother, books	15 20	
F. W. Christern, books	76 73	
J. W. Sterling, books purchased	43 25	
Dana & Silliman, Journal of Science	6 00	$351 50
FURNITURE.		
J. D. Vandenburg, curtains	$91 25	
Fisher & Reynolds, furniture	217 50	
Allen & Mackey, carpets	27 00	
J. B. Bowen, chairs	10 50	
J. W. Sterling, office table paid for	4 50	$350 75
APPARATUS.		
Charles Cleet, human skeleton	$75 00	
J. W. Sterling, paid for test tube stand	12 60	
B. Krischer & Son, smelting furnace, etc	66 00	
John Beyer, ten-pins for gymnasium	95 00	
J. & H. Berge, crucibles, etc	59 52	
Foster & Bœrlin, geometrical problems	10 00	
Becker & Sons, assay balances	150 10	$468 22

Accounts audited and paid—continued.

ROOM RENT.		
Room rent paid for students		$206 00
IMPROVEMENTS.		
Geo. W. Pitkin, paint	$103 57	
Geo. Gifford, painting	813 75	
Wm. Askew, blacksmithing	130 45	
E. Sharp & Co., plastering etc	218 94	
Smith & Stephens, mason work	1,156 85	
Wm. Davidson, carpenter work	1,524 43	
W. Ramsey & Co., merchandise	212 38	
Frank & Burgess, lumber	707 24	
Bunker & Vroman, lumber	71 78	
Sorenson & Frederickson, carpenter work	68 76	
Thos. Regan, plumbing	8 50	
Charles Daniells, carpenter work	231 75	
Hobart Scheffer, carpenter work	337 50	
N. B. Cramton, blacksmithing	25 52	
James M. Ashby, labor	35 98	
Nicholas Kelley, labor	18 75	
		5,166 15
CONTINGENT.		
Advance to J. H. Twombly, to pay bills		100 00
Total disbursements		$77,180 42

The available income for the fiscal year ending September 30, 1872, may be estimated as follows:

Interest on productive funds	$26,000 00
Appropriation by state	7,303 76
Tuition fees and room rent	7,000 00
	$40,303 76

Very respectfully,

Your obedient servant,

JOHN S. DEAN,

Secretary of Regents of the University.

FEB 21 1962